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CONTENTS AND SUBJECT INDEX

The Relations of the Physician to Public Health from the Standpoint of the Physician in the Small City. Arthur T. Holbrook, M.D., Milwaukee.....1

The Relations of the Physician to Public Health. Hugh S. Cumming, M.D., Washington, D. C. 4

The Physician and the Public Health. Harlow Brooks, M.D., New York....8

Studies in the Epidemiology of Rheumatic Fever: Annual Incidence in Some Hospitals in the United States, Its Possessions, and Canada. David Seegal and Beatrice Carrier Seegal, M.D., Boston.....11

An Experiment in the Application of Diabetic Dietetics, with Report on One Hundred Cases. M. F. DeLorme, M.D., Brooklyn.....17

Linseed Oil Dermatitis. F. J. Vokoun, M.D., Cleveland.....20

Acute Cardiac Dilatation: An Ever Present Danger in Intravenous Injections. J. H. Clark, M.D., Philadelphia 21

Repeated Acidosis and Coma in Juvenile Diabetes. Thomas A. Clawson, Jr., M.D., and George A. Harrop, Jr., M.D., Baltimore.....23

The Nasal Application of Solution of Pituitary for Obstetric Purposes: Preliminary Communication. J. Isfred Hofbauer, M.D., Baltimore.....24

CLINICAL NOTES, SUGGESTIONS AND NEW INSTRUMENTS

A New Instrument Combining Suction and Irrigation for Intracranial Surgery. Temple Fay, M.D., Philadelphia 25

Folding Loupe. William W. Goldnamer, M.D., Oakland, Calif.....26

SPECIAL ARTICLE

The Quarterly Cumulative Index Medicus: What It Stands for and How to Use It. Fielding H. Garrison, M.D., Washington, D. C. 26

EDITORIALS

Action of the Parathyroid Hormone..30

Acromegaly and Metabolism.....30

Lavoisier and the Science of Metabolism 31

The Protoplasmic Reaction of Living Cells 31

CURRENT COMMENT

Disgusting Medical Advertising.....32

Irradiated Milk.....32

The Society for Experimental Biology and Medicine.....33

(Subject Index on next page)

ASSOCIATION NEWS 33

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NEXT ANNUAL SESSION, MINNEAPOLIS, MINN., 1928

Bulletin

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Another SAUNDERS BOOK on Page 3

SUBJECT INDEX TO THIS ISSUE

The letters used to explain in which department the matter indexed appears are as follows: The Star (*) indicates an Original Article; "ab," abstract; "E," Editorial; "C," Correspondence; "Ml," Medicolegal; "ME," Medical Economics.

A. M. A., Washington Session, press comment on *54
Abdomen, injury ab-62
Acidosis, postoperative, treatment ab-73
Acromegaly and metabolism E-30
Advertising, medical, disgusting E-32
Alcohol, consumption, decrease in 44
Anaphylaxis shock, blood calcium in ab-76
shock evidenced in isolated organs ab-76
Anemia of pregnancy, pernicious type ab-72
oxyhemoglobin dissociation curves in ab-64
pernicious, from gallbladder infection ab-60
pernicious, liver diet in ab-58
pernicious, Welch bacillus in stool ab-64
pseudoleukemic infantile ab-69
Anesthesia, rectal, ether in labor ab-61
carbon dioxide mistaken for nitrous oxide 43
spinal plus paravertebral ab-76
splanchnic ab-66
Angina, agranulocytic ab-63
Anthrax antiserum production ab-69
"Apocactin" Merrell 50
Appendix, diverticula ab-63
Aqueous Humor ab-67
Arachnidism, possible C-50
Association News 33
Asthma, electrocardiogram in ab-60
blood transfusion in ab-63
Atrophy, muscular, induced glycemia in ab-71
Benzine poisoning, fatty substances in ab-74
Birth Control, opposition to propaganda 46
Blood, ammonia formation in ab-70
circulation, estimating velocity ab-64
circulation, normal velocity ab-64
circulatory failure, jaundice in ab-64
kations and anions ab-74
pressure, arterial, vs. glycemia ab-69
sulphates, inorganic, estimating ab-64
urea concentration ab-64
Bone cancer, operation for ab-66
sarcoma ab-66
Book Notices 52
Books Received 53
Brain, disease, hypertensive ab-59
hemorrhage, intraventricular ab-65
sclerosis, diffuse cortical ab-64
surgery, instrument for *25
traumatic pneumoventricle ab-62
Breast, tumors, and sex cycle ab-73
Cancer institute 46
Capillaries, cerebral, permeable to dyes ab-76
Carle, Antonio, death 46
Cells, living, protoplasmic reaction of E-31
Cesarean Section, cervical, results ab-61
Children, welfare, Italy 46
Choline extraction ab-68
Climate and rheumatic fever *11
Colds, prevention by vaccines ab-67
Colitis, mucous, roentgenologic sign ab-62
Convulsions, infantile ab-61
Cornea, tattooing ab-75
Correspondence 49
Damages: mental anguish of child Ml-56
Deaths 48
Diabetes Insipidus, urine in ab-63
Diabetes Mellitus, diet in *17
acidosis and coma in children *23
carbohydrates utilized in ab-64
insulin resistant ab-74
Diarrhea, in breast-fed infants ab-70
Diphtheria, prevention of 44
Dyspnea, cardiac, cause ab-68
Eclampsia, patient, fate ab-72
experimental studies on ab-73
Embolism, postoperative and puerperal ab-73
Encephalitis, influenza ab-63
epidemic, recovery from ab-66
Endometrium shedding in menstruation ab-71
Ephedrine vs. epinephrine ab-65
Epilepsy, calcium chloride-glucocalcium in ab-65
Ergosterol ab-74
Erythema nodosum after smallpox ab-68
Erythrocytes, diameter ab-74
in the South ab-65
Evidence: witness, expert, appointment by court, credibility Ml-56
Eye, examination, folding loupe *26
Favus in France 45
Femur, neck, fracture ab-66
Fetus, maceration, pathology ab-67
Fistulas, vesical, electrocoagulation for ab-76
Foods, iodine content ab-67
Foreign Letters 43
Fracture, open reduction of ab-66
Gallbladder drainage ab-66
calculi, enormous number 45
roentgen study ab-66
Glycosuria, renal, and pentosuria ab-60
Government Services 42
Hair, removal, with thallium acetate 50
Hay-Fever, intranasal diathermy in ab-75
Health, public, physician's relation to *1, *4, *8, ab-34
education, and preventive medicine ab-33
resorts, information bureau 45
Heart block, Stokes-Adams syndrome ab-58
dilatation, acute, in intravenous injections *21
gallop rhythm ab-58
insulin effect on ab-67
Hemoglobin in the South ab-65
Hemorrhage, disease, unusual types ab-59
Hemorrhoids, treatment ab-74
Hernia, epigastric, diagnosis C-49
Herpes labialis, zinc sulphate in 51
Histamine extraction ab-68
Hospitals, private: hypodermic injections, abscess following Ml-57
psychiatric, tuberculosis patients in ab-61
Indelible pencils, hand lesions from ab-70
Infant, developmentally unfit ab-61
convulsions in ab-61
feeding, milk requirement 51
Influenza, encephalitis ab-63
Injections, intravenous, cardiac dilatation with *21
Insulin, effect on heart ab-67
Internal Medicine, German Society of 46
Intestine, bacteria inhibited in ab-75
Intussusception, roentgen study ab-76
Iodine, anorganic, action of ab-75
Iodized oil injection, effect ab-63
Irrigation plus suction instrument *25
Jaundice, in circulatory failure ab-64
Label on products 45
Labor, blood lactic acid in ab-71
induction, indications ab-67
induction, nasal application of pituitary *24
Lavoisier E-31
Leprosy, complement fixation in 45
Leukocytosis, infectious mononucleosis ab-60
Linseed oil dermatitis *20
Loupe, folding *26
Lymphogranulomatosis of skin ab-60
Marriages 47
Medical Education, Registration 51
Medicolegal 56
Meetings, Coming Meetings 57
Melioidosis in China ab-67
Meningo-Encephalitis of mumps ab-68
Menstruation, endometrium shedding in ab-71
vaginal secretion during ab-72
Metabolism, venesection effect on ab-69
acromegaly and E-30
Lavoisier and E-31
Milk, relation to tuberculosis ab-62
irradiated E-32
treated by electricity ab-62
Minerals, metabolism ab-74
Morphine combined with scopolamine ab-75
Myoma ovary ab-71
Nephelometry ab-64
Nephritis, chronic, low protein diets in ab-63
glomerular, vs. acute infection ab-59
Nerve, trigeminal, section of root ab-76
Neurasthenia from skin diseases ab-75
New and Nonofficial Remedies 29
News 37
Nutrition, predisposition and ab-74
Obesity, studies on ab-64
Obstetrics, conduct of ab-61
Osteomyelitis, acute ab-73
Ovary, hemorrhage ab-71
function vs. basal metabolism ab-72
grafts, and reticulo-endothelial system ab-75
Pancreas, cancer, primary ab-63
Paralysis agitans, Steinach's operation in 46
Paramyoclonus multiplex ab-68
Parathyroid hormone, action of E-30
"Pasconia" Merrell 50
Peptic Ulcer, etiology ab-68
perforating, treatment ab-68
Pericardium, sensibility to pain ab-57
Peritoneum, absorption ab-60
Peritonitis, pneumococcus ab-70
Physician, relations to public health *1, *4, *8, ab-34
Pilocarpine, hyperglycemia from ab-69
Pituitary Body, dysfunction vs. acromegaly E-30
Pituitary Extract, nasal application in obstetrics *24
Placenta, estrin in ab-68
permeable to toxins and antitoxins ab-69
Pneumonia mortality in children ab-67
Polycythemia, in feather dyers ab-58
Pregnancy, abdominal ab-68
anemia of pernicious type ab-72
blood lactic acid in ab-71
diagnosis, roentgen-ray ab-73
metabolism and ab-71
vagina in ab-72
vomiting of, acidosis in ab-75
Preventive medicine and health education ab-33
Proceedings of the Society for Experimental Biology and Medicine E-33
Propaganda for Reform 49
Prostatitis, chronic, latent form ab-69
Protoplasmic reaction of living cells E-31
Provitamin ab-74
Puerperal Infection ab-61
Puerperium, postpartum care ab-61
Pulse, dynamic examination ab-74
Purpura, hemorrhagic, disease ab-59
Quarterly Cumulative Index Medicus *26
Queries and Minor Notes 50
Research, medical, in the colonies 44
Respiration, muscular mechanism ab-68
Reticulo-Endothelial System, and ovarian grafts ab-75
Rheumatic Fever, epidemiology *11
cardiac pain in ab-57
Rickets, milk and 51
Scarlet Fever, and hemolytic streptococcus ab-75
Dick test, proper toxin dose ab-69
intradermal salt solution test ab-60
streptococcus toxin ab-67
Scopolamine combined with morphine ab-75
Serum sickness, alkali reserve in ab-69
Shoulder dislocation, recurrent ab-66
Skin, Hodgkin's disease ab-60
sensitiveness to rays ab-76
sex specificity ab-75
Smallpox, erythema nodosum after ab-68
vaccination, intradermal ab-65
Society for Experimental Biology and Medicine E-33
Society Proceedings 33, 57
Spinal Cord tumors, roentgenotherapy ab-70
surgery, instrument for *25
Spine, curvature, menstruation and pregnancy in ab-71
Spleen and water metabolism ab-75
Starling, Ernest Henry, death 43
State Board Examination 51
Stomach, acidity, achlorhydria, treatment ab-65
cancer and chronic ulcer ab-60
surgery vs. intra-abdominal pressure ab-73
Suction plus irrigation instrument *25
Superfetation ab-67
Synthalin, action 47, ab-75
Syphilis, in third generation ab-71
arsphenamine-sodium thiosulphate in ab-65
Talipes cavus ab-62
Temperature sense ab-74
Tendon transplantation ab-66
Thallium acetate as depilatory 50
Thrombosis, experimental ab-58
postoperative and puerperal ab-73
spontaneous ab-58
Thyroid diseases, acid-base balance in ab-71
Tissue, survival, in oxygen chamber ab-73
lactic acid fermentation ab-75
Tongue, cancer, statistics on 44
Tonics and Sedatives ..... **Adv. page 22**
Toxoid 45
Trichocephalus dispar infection treatment ab-60
Tuberculosis, blood colloid lability ab-62
pulmonary, bacilli in feces ab-69
pulmonary, stereoscopic roentgenography ab-62
relation of milk to ab-62
resorcin flocculation test ab-70
Vernes test ab-62
Twining and hemihypertrophy ab-60
Ultraviolet Rays, irradiated milk E-32
Ureter, contractions of ab-75
Ureterocele, vesical, treatment ab-76
Uric acid excretion vs. exercise ab-68
Urine, cystinuria, arginine in ab-74
pentosuria and renal glycosuria ab-60
Urticaria, glycocoll treatment ab-75
Uterus, involution, postpartum ab-67
Vagina, artificial, formation ab-66
bacteria and power to cleanse itself ab-72
biology ab-72
in new-born infants ab-72
in pregnancy ab-72
inversion, correcting ab-66
secretion during menstruation ab-72
Vaginitis, nongonorrheal, in children ab-70
Vital Statistics, Milan 46
Vomiting, postoperative, treatment ab-63

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THE RELATIONS OF THE PHYSICIAN TO PUBLIC HEALTH

FROM THE STANDPOINT OF THE PHYSICIAN IN THE SMALL CITY *

ARTHUR T. HOLBROOK, M.D.
MILWAUKEE

The cardinal sin in medical discussion is to wander from the topic. My topic is traversed by so many trails and crossroads that it becomes quite necessary at the outset to determine those conditions of public health control and medical practice in the small city which are essentially different from those of larger or smaller organized communities.

It is perfectly clear that all physicians should take an interest in public health—that would be ideal; but the conditions before us are real and not ideal. It also seems clear that the real attitude of the profession is that the interest of the practicing physician in the administration of public health is of far less importance in the large cities than it is in the rural communities. In the large cities the matter is in the hands of full-time, well paid, presumably competent health officers with an ample staff of assistants, while the unofficial public health agencies are well organized, well financed, and directed for the most part by expert officers and workers. In the rural community too often the part-time, underpaid, inexperienced health officer has no resources, personal or acquired, with which to meet his problem and usually does not receive any assistance from unofficial organizations. The interest and aid of the physicians in this community are imperatively demanded, whereas in the large city the practicing physician realizes that the public health affairs are in competent hands and does not feel any particular urge to interest himself or to assist, outside of a conformity with the laws and rules.

The interest of the average physician, therefore, may be stated as varying inversely as the number of people in his community; and somewhere in this scale comes the district, town or city that concerns each individual physician. What, then, are the conditions peculiar to the smaller city designated as my topic?

Such a city has gone past the stage where the personal attention of the public health officials to individual cases and minor problems is demanded, and yet is in the stage where the officials have a personal knowledge of the city's physical condition, housing conditions, the various factors entering into individual health problems; not a knowledge by report or by hearsay but by personal contacts. Furthermore, the health officer of such a city has a personal acquaintance with perhaps a majority of its physicians and knows by reputation most of those he has not met. He is expected by the profession to do more than mere executive directing. Although it is not demanded of him, it is no unusual experience for the health officer to take up directly with physicians or families specific problems of quarantine, garbage disposal, odor nuisances and the like. Because of the personal relation he prefers not to delegate the duty. He knows the family concerned either personally or by reputation; he knows where it lives and the conditions of the neighborhood; he probably knows the physician in the case and calls him by his first name.

A comparable condition exists between the physicians of the smaller city and the unofficial public health organizations.

The average physician of such a city knows personally and perhaps intimately some of the officers, workers and members of the Red Cross, family welfare, antituberculosis and practically every such local organization. He is consulted by the members concerning their problems; he feels at liberty to make suggestions to his friend, who is a director of the society. He attends some of the annual dinners, contributes a moderate sum, and may be on one or two committees.

Without doubt there are many medical conditions affecting our topic peculiar to these communities, but in my opinion the outstanding, distinguishing characteristic is in the *personal contact*. In the larger city the health department and allied organizations are probably maintained at a higher development, but the personal touch is lost. In the smaller community the personal relation is even closer, but the health department and the organizations are missing. The small city combines the two.

Granting this personal contact to be an important element, what advantage can be taken of it in developing the most satisfactory relationship between the small city practitioner and the agencies for public health?

In the first place, if a hundred private practitioners in my community were to pick up a journal containing an article with the title of this paper, at least eighty-five of them would pass it by. Of the other fifteen there would be eight who consistently read journals from cover to cover, and the other seven would include the specially trained public health physicians, the men who have a grievance against public health agencies and are looking for more arguments, and the man who has been asked to write a paper on the subject. This fairly expresses the interest of the profession in a small city, and the general lack of a feeling of personal responsibility to problems of public health.

I wish to make clear my belief that practically every ethical practitioner in every department of medicine

* Read before the Conference on Public Health, Chicago, March 24, 1927.

recognizes the importance of public health control through agencies both official and unofficial. No body of professional or nonprofessional men of which I have knowledge has shown the unselfish, altruistic support of any program for public welfare that has characterized the efforts of our profession to safeguard the public health. Nevertheless, I am certain that under our present conditions the vast majority of private practitioners feel that the actual responsibility for the carrying out of this program rests with those who have chosen to specialize in this branch, those who volunteer for such service, and particularly those who are selected as officials and are paid to do the job. Each of the eighty-five would argue earnestly in favor of the program. He signs birth and death certificates punctiliously; he reports communicable diseases scrupulously; he favors milk inspection, increased taxes to insure better sewage disposal, and all the rest of that long list of needs so familiar to those who read health reports. Over the cigars after dinner he enthusiastically explains how the health department has cut down typhoid so that he has not seen a case in two years, whereas twenty years ago he thought his practice was falling off if he had less than a half-dozen cases on hand. He believes in it heart and soul; but he doesn't study it; he doesn't attend public hearings on questions affecting the city's health; he joins some of the allied societies, but he doesn't attend the meetings; he favors public clinics, but he couldn't tell where they are located. He is something like the Christian who never goes to church.

He certainly furnishes a tempting morsel of food for the thought of public health workers. How is this man to be sold the idea that every practitioner of medicine who is granted a license has a definite obligation to the state and that it is nothing short of duty for him actively to assist in the work of the health department? If he chances to live in New York State, the law and the sanitary code of his state specifically point out to him this duty and the penalties for evading the duty.

He perhaps is one of those who believe in a definite line between preventive and curative medicine. Possibly without giving it much analytic thought he takes the attitude that his job is to take care of people after they are sick, and that it is the concern of the health department and volunteer organizations to formulate regulations and enforce measures for the prevention of disease. He certainly is on thin ice. If he were a surgeon where would he draw the line between the prevention and cure of tetanus, anthrax, erysipelas, or of many other types of infection that have surgical aspects? If he were a laryngologist, what about diphtheria, toxin-antitoxin, control of carriers? If a pediatrician, how about the milk supply, prenatal management, the handling of a poliomyelitis outbreak, the Dick procedures? Each specialty would readily present its proof that no department of practice can definitely separate preventive from curative medicine. With the importance of quarantine, of surveys in limiting infections, the use of laboratory methods in diagnosis and control of therapeutic measures, the use of vaccines and serums, the resources presented by the public health department and allied organizations for the intelligent use and aid of practicing physicians, it is quite difficult to see how any thinking man would attempt to segregate preventive and curative medicine and lose the benefits of the cooperation of the two branches.

Among these eighty-five men there will be surely found a definite type of successful practitioner. He does consistently good work and he is well paid. His days are filled from early to late. He works in a little time for studying cases and for journals and meetings. He squeezes in an occasional nine holes of golf and a few rubbers of bridge. He has not had a vacation in three years. How in heaven's name, he demands, can he be expected to attend public health meetings, join the Infant's Welfare Club, read *Hygeia,* and let his assistant put in two hours at the county dispensary every Tuesday and Friday—a couple of his busiest days. He is perfectly willing to pay his taxes and help hire the best specialists possible for the job, but he certainly has not the time for any such "outside" work as public health.

Now, this sort of man is the very one needed in public health work. He is very sure to be well prepared, he is a so-called live wire, he can do things and understand people. He has to be convinced that if all the men like him should refuse an active participation, the health program of our smaller city would fail.

Also in this eighty-five will be another distinct type. He is the man who is an ultraspecialist, puts in all his spare time on an arbeit, and harbors the impression that on the upper rounds of the medical ladder are poised those who are doing research work, while down below in an indefinite somewhere are the physicians who are taking care of sick people or trying by practical means to prevent sickness. He would feel that public health matters should be entirely in the hands of those who have made an exclusive study of the subject and that it is not a matter for his concern. Honor to the microbe hunters, the laboratory problem workers. Grateful are the acknowledgments to them for the weapons and ammunition they place in the armamentarium of the health workers. But equal honor, at least, to the earnest, studious, ethical men who are working to prevent and cure sickness. A good salesman is needed to tell a thing or two to this hyperdeveloped man.

The unsuccessful man may be in the eighty-five or in the fifteen. Usually he does not matter so much, for he lacks preparation, or force, or common sense or industry. Possibly—and probably—he has a grievance against the health department and the volunteer organization. They vaccinate his patients free; they take his baby to the welfare meeting and have its food prescribed; the clinics and dispensaries get many of the people in his neighborhood and he just plainly has no show. Well, this man in many communities probably has a right to complain. In the zeal to build up dispensaries and clinics; to better conditions of motherhood, infant care and feeding; to stamp out tuberculosis, and other laudable enterprises, the case of this struggling doctor in a poor neighborhood may be overlooked. It is an old, old controversy and no matter how long or how loud it is argued it will always come back to the one common sense conclusion of recognizing on the one hand the absolute need of free clinics and dispensaries, and on the other hand the absolute requirements that they be carefully regulated and supervised so as not to work an injustice to the physician who could not survive if the government or volunteer organizations indiscriminately offered free treatment to those who should pay. Fairness, tact, a mutual understanding and common sense are the remedies.

There are probably a few men who snapped back the page on public health matters with some show of feeling. They are the ones who rarely lose an opportunity to warn of the perils of state paternalism and the regulation of one's private affairs by commissions and

societies, by long haired men and short haired women and other cranks, who feel that they have a mission to save the world. One of these physicians tells of the nurse who came from the welfare society to show one of his patients how to make her bed and wash her baby. He deplores the circumstance that he was not there to throw the nurse out the window. Another knows of two women in the motherhood association who are not fit to be in the same theater with his scrub woman, and he has heard that the treasurer of the Red Cross chapter beats his wife. It is an easy thing to let personalities influence one's estimation of a movement or an organization with which these personalities are associated. Let a popular, highly esteemed and trusted man head an organization, and success and achievement are fairly certain to follow. On the contrary, a weak president or an uninterested, carelessly chosen board may ruin for a time any organization. It becomes important, therefore, for these groups not to organize loosely or carelessly and stand vulnerable to opponents who are only too ready to wreck what may be a splendidly conceived movement for great public good.

In my opinion the medical profession leaves the work of the allied organizations too much in the hands of the laity. Some one has said that "medicine has a poor vision when it comes to seeing socially," and the indictment is more or less true. There would be far less criticism to offer these organizations if physicians were a bit more far-seeing, if they sought membership and activity in these agencies, gave freely of expert medical advice, interpreted and explained technical aspects to lay members, gave talks before clubs and other groups to help educate the public in the objects and activities of antituberculosis, Red Cross, family and infant welfare and like activities. On their side these organizations should realize that their greatest usefulness is attained when they supplement the work of the public health authorities and work in close cooperation with them. Kipling's oft-quoted lines might well be made familiar to their membership: "It ain't the individual nor the army as a whole, but the everlasting team-work of every bloomin' soul."

So far I have been considering chiefly what the public health agencies should expect of the physician. Let us shift the point of view and ask what the physician of a small city has a right to expect of his public health department.

First of all, the head of the health department in a small city must be a scientifically trained man, adequately prepared for his job. Too often these requirements are subordinated to the political qualifications that influence his appointment. I quote the statement of a recent report that "the greatest handicap to municipal health work in Illinois arises from the harmful influence of local partisan politics;" and if department heads are politicians instead of single-purposed, scientific workers the health of the public is going to suffer. In the selection of this trained official, for a smaller city at least, I feel strongly that he would be a far more efficient public servant if he were a local man rather than an imported stranger. I can conceive of local situations which would demand the seeking of an outsider for the health officer, but this would be a distinct disadvantage in losing the personal contact and acquaintanceship which I have urged as an important asset.

The physicians have a right to know definitely the attitude of the health officer toward medical practice in the community. Is he going to insist on protection of the rights of physicians in the dispensaries and clinics, on the courteous cooperation in the public city hospitals, on the proper reference of cases back to the original attending physician? I myself have never met a public health officer who, if approached in a reasonable spirit, was not perfectly willing to cooperate with me in all fairness in the consideration of my patient. Probably the other sort of health officer exists, but he is not an avis vulgaris and he would be very short-sighted not to realize that without cordial relations with the medical profession he is doomed to absolute failure, no matter how highly trained he may be.

In the smaller city the fact of a severe or unusual illness is general news or gossip and is given daily newspaper notice. It becomes a matter of no small importance to the physician to keep his conducting of the case free of criticism. If he has a clash with health officers about quarantine, removal to hospital, attendance in school of exposed children, or similar situations, and is openly and tactlessly opposed by the health department, he is very liable to unfair criticism and to being discredited by a large number of people. Consideration, tolerance and tact on both sides are all that is needed.

The advent of quacks and irregular practitioners in a small city presents its special problem. Contrary to conditions in a larger city, through hearsay and the newspaper practically the whole population of the smaller city knows of the presence of the impostors and prompt dealing with them and deportation become necessary to the medical morale of the community. This is a task the ethical physicians have a right to demand of the health department.

It would be tiresome to continue the list of the many situations affecting the relations of small city public health workers and practicing physicians. Enough has been said to indicate some of the more important problems, and I should like to recapitulate and emphasize three of them.

1. *The personal element in the relationship.* This means the selection of a properly qualified, local man at the head of the health department; the stimulation of interest in official and unofficial public health work on the part of practitioners and laymen; the cooperation of these men; the taking advantage of personal acquaintanceship with conditions and people in establishing a mutual, cordial and efficient relationship.

2. *The groundless fear that the public health administration will deprive deserving physicians of a competent livelihood.* This is a matter which simple fair-mindedness and common sense will settle among men who have a disinterested desire to cooperate.

3. *The fallacy of trying to define the exact and separate responsibilities of preventive and curative medicine.* There is no line of cleavage between these two. Of necessity they overlap, and where they run together each department must cooperate with the other. When the field of each becomes distinct, there the individual responsibility of each begins.

CONCLUSION

What measure or measures can be offered to secure most satisfactorily a proper handling of these three important considerations? I believe that Dr. John P. Koehler, health officer of my city of Milwaukee, has devised an effective means to the end we are seeking in the appointment of his advisory board. I am aware that the appointment of advisory boards and committees is not new, and have no doubt that other health officers have appointed boards along similar lines; but I do

know that Dr. Koehler's plan has been particularly carefully studied and carried out and that there are small cities where such an advisory board is not being used although it would form a valuable adjunct.

The advisory board of the Milwaukee health department is composed of fourteen members. It includes six physicians and eight laymen. The physicians are appointed as representatives of the leading local medical societies, include the head of the milk commission, and are well distributed among the staffs of different hospitals, forming a group that is comprehensive of the various medical specialties and interests. The laymen include representatives from the allied volunteer health and social organizations, chairmen of the federated trades council, building trades union, etc., and the chairmen of the health committees of the county and city councils.

The health officer presides over and directs the activities of the board. When a question of general interest is before the health department, the entire board is asked to attend meetings for its consideration. It is definitely understood by the health officer and the members of the board that any member or group of members is subject to call and to consultation by the department on problems of which such members may have particular knowledge.

The results of such an arrangement are manifold. The health officer is able to avail himself of the advice of experts. The various interests represented by the board have a ready means of intelligent, practical appeal to the health authorities. Mooted questions after discussion at the general meeting may be carried by individual members to the organizations they represent, and the sense of these groups be carried back to help the satisfactory decision of the board.

When some important measure is before the common council, the county supervisors, the state legislature, the mayor or the governor, a great deal of influence will be carried with the expression of opinion of the fourteen men who have been chosen because of recognized qualifications and who represent the opinions of hundreds of other citizens composing the organizations from which they are delegated. In the small city where these men are personally and presumably favorably known, such influence is very potent, and the effect of the newspaper published personnel of such a board with their expressed opinions is of much importance in stimulating that active public interest on which the health of every city must largely depend. The cooperation of the medical profession and the volunteer health agencies with the health department, and the mutual confidence inspired by this intimate contact of lay interests and medical interests have earned for this board of advisers the title it has been given of the "Unofficial Guardian of the City's Health."

711 Goldsmith Building.

Auricular Flutter.—A study of auricular flutter throws further light on the occurrence of syncopal attacks associated with tachycardia. An attack of auricular flutter can be distinguished in many cases from one of paroxysmal tachycardia only by means of an electrocardiographic record. It is characterized by a very rapid ventricular rate, reaching sometimes from 200 to 220 beats per minute or even, according to some, 300. As a result the ventricular contractions at the onset may be so weak that the patient loses consciousness. An attack of auricular flutter may be sudden, brief, without any previous symptoms of ill health, and without any subsequent change in the heart.—Sutherland, G. A.: Fits and Faints, *Lancet*, June 11, 1927.

THE RELATIONS OF THE PHYSICIAN TO PUBLIC HEALTH*

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I have been asked as Surgeon General of the federal Public Health Service and as representing the official health organizations of the country to discuss "The Relations of the Physician to Public Health." It is needless to say that any views I may present are only my own personal impressions, which may perhaps be of value because of the opportunities that have been afforded me by my official position during the past seven years and through a service of thirty-three years in different regions of our country to hear the opinions not only of public health officials but also of nonofficial workers, medical men in private practice, and the public in whose welfare we are all equally concerned.

As a matter of fact there is probably no unanimity of opinion throughout the profession; and, indeed, there must be so many varying factors, both personal and environmental, throughout the country which affect individual opinion that there never will be any "cast iron" written constitutional delimitations of rights and responsibilities applicable to the whole country. If the purpose of this conference be to lay down such rules we shall fail, for in the last analysis the answer lies not in us but in the public whom we serve.

Nevertheless, there have been few conferences in this country more fraught with the possibilities of good or evil to the medical profession and to the welfare of the public than this may prove to be, and I feel very deeply that in the beautiful language of the Common Prayer Book, "It is not by any to be entered into unadvisedly or lightly but reverently, discreetly, advisedly, soberly, and in the fear of God."

May I not quote Sir William Osler's beautiful description of our profession as something to think about in the conference?

> 'Tis no idle challenge which we physicians throw out to the world when we claim that our mission is of the highest and of the noblest kind, not alone in curing disease but in educating the people in the laws of health, and in preventing the spread of plagues and pestilences, nor can it be gainsaid that of late years our record as a body has been more encouraging in its practical results than those of the other learned professions. Not that we have lived up to the highest ideals—far from it—we are only men. But we have ideals, which means much, and they are realizable, which means more. Of course, there are Gehazis among us who serve for shekels, whose ears hear only the lowing of the oxen and the jingling of the guineas, but these are exceptions; the rank and file labor earnestly for your good, and self sacrificing devotion to your interests animates our best work.

We know as a biologic fact that the instinct of perpetuation of the species is far more powerful than self preservation, and in our profession the preservation and betterment of our fellow man is far more potent than our own interests, as has been and is being shown by every physician worthy of the cause. I am confident that we approach the problem in this spirit of self abnegation.

* Read before the Conference on Public Health, Chicago, March 24, 1927.

PAST AND PRESENT RELATIONSHIP OF PUBLIC HEALTH AND MEDICAL PROFESSION

From the earliest civilization there has been an almost uninterrupted recognition of the fact that public health is a governmental or public function, as has been evidenced by the public water-works and baths and various official positions established by Greek, Roman, and other governments, the maritime quarantine laws, segregation of lepers, the Hebrew and Egyptian laws regulating hygiene, and the English laws about plague.

There would seem, too, to have been some provision for hospitalization, such as the temples of Æsculapius and the Roman hot baths at Sospel in Gaul and at Bath in Britain, to which soldiers were sent for cure and convalescence.

It is difficult to distinguish between ecclesiastical and secular government in the middle ages, but there gradually developed orders and institutions for the care of the sick, and the endowments of such institutions may be properly considered as the beginning of non-official public health work.

But such effort was for the relief of suffering rather than its prevention, except in the segregation of lepers and other quarantine procedures against the epidemic diseases.

Nor can the lack of preventive medical measures be justly attributed to indifference on the part of rulers and peoples, for "man power" was the essential factor of success in those days; rather was it due to ignorance as to what to do.

The modern public health movement, by which I mean action taken by organizations official or nonofficial to prevent the spread of disease and to remove or alleviate conditions both personal or environmental so as to eliminate diseases from masses of people as distinguished from treatment of the individual, began in Great Britain in the nineteenth century as a result of the industrial development, and doubtless for the same reason about the same time as movements toward better housing and sanitation. It has been a governmental function there from the start, and I do not think non-official bodies have had a great influence other than educational.

Britain, however, is a compact, thickly populated area, and laws regulating sanitation problems such as housing, pollution of streams and quarantine restrictions became a matter of necessity about the middle of the nineteenth century.

In this country, until the past quarter of a century, and with the exception of the two or three industrial states and a few large cities, our problems in preventive medicine were essentially those of environment, such as the suppression of pestilential diseases and the control of water and milk supplies, which are matters for governmental control.

Our development has not been one of a central government gradually decentralizing and giving up powers to state or local authority but, on the contrary, the colonies, subsequently states, retained and developed their public health powers as need required, while federal authority was restricted to assisting the states and to matters of foreign and interstate commerce, and grew *pari passu* with the development of the latter.

Even within the states the growth of health organizations was local and urban rather than state wide save in states subject to invasion from yellow fever. This condition continued with the exception of a few urban or state organizations until within the memory of many of us here. We must remember that until within the past thirty-odd years specific remedies were known for only malaria and syphilis, while the methods of transmission of the great pestilences were unknown except those spread by contact.

Modern public health activities were made possible by and followed the epochal discoveries of the bacterial causation and mode of transmission of such diseases as tuberculosis, cholera, diphtheria and typhoid fever, by Pasteur, Koch and others, and were in a few years broadened by the discovery of diphtheria and other antitoxins followed rapidly by the discovery by Manson and others of the rôle of insects and vermin. Within two decades more knowledge had been gained in medical science than in all the ages before.

While the effect of this knowledge on the field of curative medicine was revolutionary, it was insignificant compared with the events that followed in the great field of preventive medicine. As the searchlight of science was thrown into the misty darkness of one after another of the pestilential diseases which had for ages been scourging the human race, the hopeless and futile blind efforts of the past gave way to intelligent labor for their conquest.

The army of physicians who had hitherto stood alone in its fight against disease was joined by allies such as the sanitary engineer, the laboratory scientist and others.

And now that the trumpet of battle gave no uncertain sound and the physician could speak to the public in language which could be understood, as St. Paul put it, the people of intelligence began to be aroused to the importance of the application of knowledge to the prevention of disease, and there followed the installation of water supplies and milk control with rapid lessening or disappearance of the water-borne diseases such as typhoid fever and cholera.

Application of appropriate measures led, too, to the practical elimination of typhus fever and diminution of tuberculosis and smallpox.

It should be recalled that quite naturally attention and effort were directed against the great epidemic diseases, such as cholera, yellow fever and typhoid, against which individual action was of little avail and in which governmental action was necessary.

In this field the rôle of the physician in private practice can consist only in his wise guidance of the opinions of his fellow citizens in securing adequate public health organization in his community, state and county, and in the correst diagnosis and faithful reporting of disease. His responsibility here is great and even now is too often shirked, not always because of ignorance or selfishness but because of mistaken notions of professional ethics and dislike of political activity.

DEVELOPMENT OF HEALTH ORGANIZATIONS

No review of the growth of public health activity in this country would be complete without reference to the development, unique and almost peculiar to this country, to a much less extent in Great Britain, of national nonofficial organizations devoted to various phases of improvement of the people from general welfare or education, to fighting individual diseases. The influence of these organizations on the public health has been of inestimable value not only in the work accomplished by them but also in their influence on public opinion and stimulation of government, legislative and executive, to increased efficiency.

Sixty years ago there was, so far as I know, no large endowment nation-wide in its scope.

Mr. Peabody gave the endowment for the Southern Educational Board, and if it had done nothing else than bring Wickliffe Rose into the field of welfare and public health it would have been money well spent. I am informed that now the endowments for educational purposes aggregate the stupendous sum of one billion of dollars, and it should be remembered that much of this is being used to educate physicians for private practice.

Sane education, even if not consciously directed toward that end, is a powerful factor in the betterment of public health.

In addition there have been created organizations devoted entirely or in part to public health work, some of which depend entirely on endowments, such, for instance, as the Rockefeller Foundation, the Commonwealth Fund and the Milbank Fund, while others, such as the National Tuberculosis Association and American Social Hygiene Association, depend wholly or in part on voluntary subscription.

The efforts of these organizations have been directed along quite different though sometimes converging lines, for while the Rockefeller funds for instance have been expended directly in educating physicians in research and in directly aiding state and local officials, other organizations which depend on popular subscriptions must of necessity concentrate on those problems in public health which interest the lay public and in the solution of which nonprofessional personnel can actively engage. They must also be directed chiefly toward efforts which rapidly show tangible results. Perhaps the greatest influence of such organizations has been in the education of the public and the stimulation of governmental activity.

However much we may believe in the doctrine laid down by Disraeli and other statesmen, both British and American, that the protection of the health of the people is the first duty of a statesman and that public health is a governmental function, it is not probable that, under the present conception of government, we shall either eliminate nonofficial organizations or prevent the formation of others. We have no idea, I think, in this country of having confiscatory tax rates which will automatically dissolve fortunes on the death of their makers. We have not in this country anything like hereditary titles or honors. So long as human nature remains as it is, large fortunes will be left for the endowment of organizations for the promotion of public health. When they are not contrary to the public interest, an attempt must be made by the trustees of such funds to carry out the desire of the donor. I am frank to say I believe there are too many nonofficial societies, national in scope, in the country. I am sure you will agree with me that many nonofficial as well as official crusades have been unwise and indeed perhaps harmful; but there is a marked tendency toward consolidation, cooperation and the employment of enlightened methods.

DEVELOPMENT OF MEDICAL PROFESSION

During this same period the medical profession has been passing through a process of evolution from a scattered number of men, individualistic perhaps, to a greater degree than members of any other profession, and with educational qualifications ranging from a mere smattering knowledge of medicine to the highest scholastic attainments and skill. The profession is now perhaps the best organized guild in our country, with organizations from the county and city to the American Medical Association and other special societies. A marked improvement in professional attainments has resulted.

The public has recognized the dignity and importance to the common weal of properly qualified physicians, and has thrown around the permission to practice barriers which require higher intellectual and educational requirements than those of any other calling, including law, the church or nonmedical public service. While the practitioner of former days required little armamentarium beside half a dozen books, a few drugs, and instruments, he now requires an expensive equipment and the assistance of a large staff of technicians. The increased knowledge of disease, too, is such that its possession and application is beyond the capacity of any individual, so that cooperation is necessary.

Although the amount of honorarium has by no means increased in proportion to the increased outlay of the physician in attaining and maintaining his position, it is nevertheless such that concededly the best professional services, even where available, are beyond the financial ability of a very large proportion of our public; furthermore, these requirements are not everywhere available, especially in our rural and small town areas. Nor has the medical profession as such appreciated its duty to the public in the matter of education in preventive medicine.

PUBLIC HEALTH ACTIVITIES

Some of us at least are familiar with the development of urban, state and federal public health activities. Federal medical activities are confined, so far as the Public Health Service is concerned, to treatment of seamen of its several services, and of its personnel injured in line of duty, together with such functions as quarantine and immigration, assistance to the states, and the control of biologic products.

The Veterans' Bureau under existing law, imposing on it the hospitalization of any veteran of any war suffering from any disease regardless of origin, has a responsibility for about four or five million people, a very serious essay at "state medicine" hitherto not attempted in our states.

Our state and health organizations have developed from mere skeleton groups of part-time physicians whose sole object (with one or two exceptions) was the prevention or suppression of epidemics, to highly organized departments whose energy is directed not only toward the elimination or eradication of environmental diseases such as yellow fever, typhoid or malaria, and to the suppression of outbreaks of such communicable diseases as smallpox and diphtheria by isolation and treatment, but who have entered the field of preventive medicine by attempts at universal vaccination and protection against these diseases. Some states have begun the free examination of specimens as well as the manufacture of laboratory products. In several states, free clinics in connection with school work or otherwise are being conducted.

In addition, in many states so-called demonstrations are being conducted and managed by nonofficial organizations.

City health organizations vary from mere attempts at control of communicable disease and of water and milk supplies to frank attempts to enter all fields of preventive and curative medicine which will benefit the public health.

To sum up, the problem which we are discussing would seem to involve the "eternal triangle," the public, the health official, and the practicing physician, unless indeed it is looked on as a quadrangular affair by dividing the health workers into official and nonofficial. The medical profession is more highly organized, and its individuals are more competent than ever before. Its distribution, however, is unequal; and while both personnel and equipment are available to the richer and poorer class in our larger urban communities, it is the general opinion that the full resources of medical sciences are not available to the great middle class in our cities, unless they accept public aid, while in large regions of our country there is insufficient number of physicians and facilities. It is, too, I believe, a fair statement to say that the physicians as a class have not appreciated their obligation to the public in matters of public health, particularly in matters of health education. It is extremely gratifying to know that under President Phillips and the present board of trustees of the American Medical Association this condition is being remedied.

Secondly, public health officials and nonofficial organizations devoted to public health no longer have their attention and knowledge concentrated solely or to a large part on the environmental and epidemic diseases, but are directing their energies not only toward the prevention of those diseases which are influenced chiefly by personal hygiene and economic conditions, but also toward procedures that will result not alone in preventing disease but in improving the mental and physical efficiency of the individuals that compose our people. As to the public at large, while those of us whose lives are devoted to public health work are often discouraged by the ignorance and indifference of the public, it is nevertheless true that within the last few years, by the mobilization for the war and by intensive educational efforts, the public as a whole has been aroused to the importance of health. One of the most significant factors is that the question is no longer approached solely from ethical and humanitarian motives, but the enormous economic loss which may be prevented by the application of medical science is now appreciated by great corporations. It is significant that perhaps a larger part of the nonmedical public health work now being done is under the direction of nonmedical men.

Finally, the question of the proper relation of the physician to public health is one that cannot be laid down for the country as a whole. The public cannot be expected to care particularly as to whether the fortunes of the medical profession will be injured in the attainment of the goal of public health. If the profession is not aroused to the importance of the problem and does not wisely guide and assist the public, undoubtedly we shall have, at least in parts of our country, attempts at the socialization of medicine such as are being made in other countries. The physician has been given a privileged status by the state and therefore owes to the public the duties not only of an ordinary citizen but in addition those of an adviser and guide. The answer is not to be sought in any formal action by national organizations. It is to be found in the attitude of the local profession in each community. The duty of the physician to the public should be taught in our medical schools. The local societies should see that public health office is taken out of partisan politics, that competent public health officials are chosen, that adequate appropriations are made available for legitimate public health work, and that moral and active assistance should be given the local officials. It may be significant that in my own life as a public health official I do not recall ever having heard a health officer complain of the intrusion of the private practitioner in his field of activity. I believe that the apprehension of many of the private practitioners as to the possible disastrous effect on their practice of the public health activity is unfounded. It is well to recall the apprehension of the mill workers of England as to the effect of the introduction of machinery on their chances of making a livelihood. We are constantly seeing that as certain fields of medicine are covered by the state, new fields of activity and usefulness are being opened to the medical profession.

In discussing the relationship of the physician to public health, we must appreciate the truth of Lowell's couplet:

> New occasions teach new duties,
> Time makes ancient truths uncouth.

The science of medicine, including, as it does, the whole field of knowledge, can no longer be restricted within the confines of the medical profession; the biochemist, the sociologist, the physicist, the sanitary engineer and the worker in pure science must necessarily all be included in public health and, from a research standpoint, with curative medicine itself, if indeed there be a line of demarcation between curative and preventive medicine; for instance, the cure and prevention of tuberculosis is as much an economic problem as it is a medical problem. Even in the field of private practice in curative medicine, the physician, in the usual sense of the definition of the term, is often no longer capable alone of diagnosing and treating the patient, but must of necessity rely on nonmedical technical assistants, and ultimately depend for his remedies either on the state or on commercial enterprise under state supervision. The age of the individual craftsman is over. The soldier, whether he fights the battles of science or of war, no longer forges his own weapons. The common note of the present age is cooperation, nor in a political government such as ours can we speak of voluntary and official action as being separate, for the action of the official is the expression of the wish of the people.

CONCLUSION

I am afraid these remarks of mine have been discursive. I am attempting to point out that:

1. It will be impossible for this or any other group to delimit the respective fields of the private practitioner and the public health official in specific terms appropriate to the whole country.

2. The people as a whole appreciate the value of and, in a large part, the method for obtaining health. They are naturally more or less indifferent as to how this end shall be accomplished.

3. The medical profession must appreciate this fact and aid in working out a solution.

4. It is the privilege of the profession to cooperate with the public and its duly appointed representatives in the development of a satisfactory system, and it would be unfortunate to give the public at large any impression to the contrary.

5. From time immemorial the medical profession has been regarded as the natural sponsor not only of individual but also of community health. Legal provisions relating to standards of medical education and

privilege of the practice of medicine rest on this foundation. Whether this service in future shall be rendered by the profession in cooperation with health authorities or be made incumbent on the legal health representatives must depend on the character of the service rendered by the profession. It should be the object of the organized profession to impress on each individual physician his responsibility in this matter.

THE PHYSICIAN AND THE PUBLIC HEALTH *

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I speak today from the point of view of a medical man engaged in active practice in one of the great urban centers. I shall consider particularly those various points on which the medical practitioner in these centers is likely to be, or may be, out of complete sympathy with the activities of lay organizations that have largely interested themselves in questions pertaining to public health matters.

At the outset I wish to state that I, and I believe all my fellow practitioners, honor, respect and crave the assistance of every lay person and organization that is devoted to altruistic service to the public, to the alleviation of suffering, and to the betterment of mankind. Whatever I may say in the way of criticism is meant to be in the nature of a constructive one. Our purpose is, and should be, identical. As to the methods by which this may be best accomplished, I believe that there is often room for argument and full consideration.

If we may grant, at least for the sake of argument, that my point of view is to be that of the professional in regard to matters of health as contrasted to that of the amateur in health matters, I do not think that I am asking too much. I will consider also as professional health workers equal with ourselves all those who in their training in hygiene, bacteriology, pathology, anatomy, physiology and therapeutics have equaled the requirements in these subjects of a Class A medical college. In this assumption I feel that whether or not such persons have a medical degree and a license to practice, they are equipped to be grouped with us as professionals and not as mere amateurs.

Sanitation, epidemiology and the executive features of public health work must be considered only as specialties in medicine, just as we practitioners group ourselves as neurologists, surgeons, internists, and so on. Without a basic training in the elemental medical sciences there cannot be true specialization in such work any more than the surgeon can be permitted to practice his craft without a careful training in physiology, in bacteriology and in the other essential fundamentals.

I wish also to advance as my ideal of the specialist in public health that splendid group of officers comprising the U. S. Public Health Service, and those in the medical departments of the army and navy, whose everyday function it is to apply the problems of public health in a practical way. To such men the medical profession as a whole gives its sincere confidence and full cooperation. I do not know of any exceptions. We have every confidence in all those specialists in public health who are legitimately specialists. We have a quite natural suspicion of those lawyers, politicians, business men, preachers, and otherwise unoccupied ladies, grouped so loosely and so thoughtlessly as "social workers," who do not have basic training or understanding of those subjects to which we have so seriously and with single hearted zeal devoted our whole preparation and life.

I was astonished the other day to read the statement of a worker in public health that the practicing medical profession was often found in conflict with public health activities. I cannot understand such a position unless the public health service in that instance was interested, as are some of the lay organizations, in activities basically contrary to the teachings of medical science and to the welfare of the public and its infirmities, just as some lay organizations advocate antivivisection, antivaccination, and various quack institutions and projects.

The statement has also been made that because the medical man is chiefly concerned with the sick person he cannot, therefore, be interested in the problems of the community, which, if I understand it properly, is made up merely of collections of individuals. The absurd accusation has also been laid against the medical practitioner that he is not interested in the prevention of sickness but only in its alleviation. I am sure that the individual who made such a silly and entirely unfounded statement never had a family doctor. The family doctor is and always has been the very bone and sinew of all successful methods for the prevention of disease. Little has ever been produced in the prevention of disease which has not been based on the preliminary work of a physician, or on that of the trained scientist who has the identical preliminary schooling which the physician must secure before he is permitted to graduate or to take out his license to practice. The doctor has never opposed true medical progress, but bitter experience has taught him to view with great caution the emanations of untrained, unthinking, irresponsible and often unscrupulous dabblers in health and medical practice. The practitioner is slow to accept unreasonable theories, to jump at cure-alls or to contract the hysteria which in every epidemic is likely to develop in the largely unoccupied masses.

The accusation has also been made that the medical practitioner is not public spirited, not a nationalist—this, mind you, of a profession that recently voluntarily gave 20 per cent of its personnel, old and young, in a great national calamity; of a profession the members of which are acting generously, anxiously and efficiently on the boards of every educational advance, every church and charitable venture; a profession that has always identified itself personally and as a united front in every good project of humanity. I know that there are those who feel that hospitals would be beautifully efficient institutions if only there were no doctors to demand that business step aside for the welfare of the sick, and that organized charity reach the unfortunate instead of spending its efforts and funds on a perfect business institution. That the doctor is not a business man, I confess. The recent revelations of the income tax proves that definitely.

We are that single profession which statistics show devotes voluntarily from 25 to 45 per cent of its time to unremunerated personal charities, mostly to that large and generally inarticulate mass of the unfortunate.

* Read before the Conference on Public Health, Chicago, March 24, 1927.

which are the secret wards of every honest medical man. Do any of you know a single practitioner who does not devote to the very best of his ability a large percentage of his time, without remuneration, to the care of the unfortunate sick?

But enough of this foolishness. Criticisms of this ganglion cell-less type simply indicate the motivation of its authors. As General Harbord, a great soldier and a greater citizen, has recently said, most of this propaganda originates from the activity of a pathogenic bacillus known as the paid executive secretary. He has never flourished in the culture medium supplied by the medical profession.

Misunderstandings have arisen, it is true, honest misunderstandings between the profession and some worthy public health activities. Was there ever progress without argument and criticism? There is little or none in those activities controlled by the United States Public Health Service or in those of the state or city health departments when they have been controlled and directed by trained medical men. The commissioner of health of our great, generous and progressive city has in a recent bulletin thanked the state and county medical societies and the Academy of Medicine of New York, all of which he terms his allies, for the full cooperation and assistance we have given him. I have never known it to be otherwise when we have had, as we now have, as our commissioner a physician who still remembers his training and his origin, and who still believes in medical ethics, which, I take it, is only a concrete application in our profession of the Golden Rule.

Misunderstandings between the profession and social activities along the line of public health have almost without exception originated when we have been asked to abrogate, to forget, our scientific training, or when our code of ethics has been ruthlessly ignored. Are we ready to scrap our code of ethics? If so I wish to leave medicine and become an arctic explorer or a field archeologist and be no longer a doctor. There is no more reason why medical ethics may not be applied in public health than in any other specialty in our profession. No efforts at progress will succeed until lay organizations are brought to realize that we shall first uphold the principles that have made modern medicine and the true physician of all times.

I believe that I may rightfully claim an intimate acquaintance with the members of my profession in the large community in which I live. I know few rascals in the profession; I know very few men who do not value their professional standard as high as life itself. I do not know of any practitioners who do not gladly give up a very considerable portion of their time to unremunerative and largely secret charities. I know but a few men who do not read the current journals and who do not buy, even at the prevailing high prices, standard text and other professional books. I know very few doctors who do not try to keep abreast of the times. I know few doctors who die rich; I know many who might do so if they were willing to conduct their profession as a business. I am sorry to say that I also know a few doctors of very exceptional ability who never attend medical meetings and who give none of their time to the necessary routine of society work. They are unknown outside their personal practice and perhaps to a few specialists and consultants, yet they are also an honor to their calling. I know many doctors who devote their time as employees of business institutions. Some of them are men of considerable capabilities, but they have been dwarfed and curtailed by business control. Few of them frequent the libraries or medical societies. Eventually they become worth no more than the salary they receive. They are the result of the vaunted "business control of medicine." Many of them devote their time as secretaries and agents for organized charities. They are despised by their employers, who would never trust to them their lives; they are useless to the profession, and they eventually become so "organized" that they might as well be classed merely as lay secretaries.

What does the physician in family practice resent in the activities of public health? He resents nurses doing the work of physicians, making diagnoses and dictating treatment which the family physician shall carry out. Do you blame him? He resents the underpaid, time-serving employee of the department who from the wealth of his inexperience minimizes to school children the work and ridicules the respect of their family doctor. He resents, too, wholesale septic vaccinations and other evidences of legal but bad practice. He resents the snap diagnosis of an employee of the department on a case to which he has perhaps given serious and experienced study. He resents being directed the institution of treatments which he knows from his journals and from his societies to be still in the experimental stage. He has often just cause for his complaints, for he knows himself to be the better man.

This is all easily correctable. Nurses are nurses until they have studied medicine and legally qualified themselves as practitioners of medicine. They should not be allowed to do as an agent of public medicine work which the law does not permit them to do as private individuals.

Physicians working under the direction of public health institutions must be sufficiently remunerated so that competent men may be retained. Such men will always meet courtesy, compliance and cooperation; the cheap man will not.

In a recent publication, attention has been drawn to the great economic waste which results in the duplication of work prosecuted by the many lay directed organizations. This could be avoided were these activities directed by professional, and not jealous lay, skill. Concentration under professional control would result in such economy that the money of the public would not be so wasted, and at the same time adequate salaries could be paid so that professional workers in this special field of medicine might properly compare their lot with that of the successful teacher or practitioner of medicine.

Employment of young physicians at meager salaries robs the profession of the material from which it should recruit its general practitioners, now the greatest need of the profession. I often tell my interns as they graduate that the worst thing that could happen to them would be to receive a salary on which they could live from some lay institution in which the professional experience does not reward the service; for many of them later in life would not dare to give up their salaries and start out for themselves. Some of the brightest youngsters I have ever known have been ruined by such activities. They typify the business and non-professional controlled society.

Another matter in the control of professional institutions by the layman lies in the demands made on the

young men for service inadequately repaid either by the experience gained or by the pay received. Many of our private lay controlled hospitals are sinners in this matter. Some of them are notorious for their ruthless but entirely businesslike exploitation of the young physician.

Wealth, under the guise of charity and public health progress, more than seldom dominates even medical education. High endowments without professional control have dwarfed medical teaching in more than one institution. This is a matter for your attention.

Public medicine cannot be divorced from private medicine, except at a loss by both. The most potent and influential teacher of public medicine and of practice is the physician in contact with his patient. No public medicine can succeed professionally that has not the endorsement of the average physician.

The value and the influence of the average practitioner is beyond the comprehension of the executive who is himself not conversant with the details of medical practice or who has through lack of experience so estranged himself from his profession and its practitioners that he fails to comprehend even its purposes. He is likely to develop from his ignorance of real medicine and its problems a superiority complex of particularly inexcusable type. This is the disease from which many public health workers suffer; they are the ones who criticize the average physician. The public health worker must keep in touch with the general science of medicine and not criticize his brother who perhaps in the stress of his work has neglected to remain fully conversant with the special methods of public health. There are few surgeons who appreciate the labor of the psychiatrist; each considers the other something of a medical invert.

We of the medical profession believe that a license to practice should be granted only after four or more years of study in an accredited school, superimposed on a preliminary education of no mean extent or small cost. That this idea is not held by the public at large is only too vividly shown in each state each year by all manner of cults, often backed by the clergy, well intentioned philanthropists, financiers and people of all sorts, intelligent and otherwise.

If we are correct and well founded as to our requirements as regards the private practitioner, why is it that the practitioner of public health may be self anointed, as it were? Is the public to be less protected than the individual? May we not apply here also the invidious comparison dictated by the Egyptians of old, who admitted that Saul had slain his thousands, but David his tens of thousands? And there are many Davids engaged in their favorite avocation of public health, how many only the properly prepared medical practitioner is able to judge.

Surely there are few of you who have not read in a recent number of the *Atlantic Monthly* the exceedingly covert but telling and just arraignment of the control of medical education by self perpetuating bodies such as the General Education Board and other similar endowments. Is it not apparent to most of you that we are allowing precisely the same condition of affairs to dominate the field of public medicine? An exceedingly thoughtful and just editorial[1] appeared in THE JOURNAL, March 5, on this very subject.

I have also noted in THE JOURNAL an editorial entitled "The Physician's Responsibility in Preventive Medicine."[2] There are few, if any, practitioners among my colleagues in New York who are not willing, more than willing, to accept these implied responsibilities, few who do not subscribe whole heartedly to every word expressed in this timely editorial.

I recall a time not so long ago when the medical profession of my city did all in its power to increase the authority and powers of the United States Public Health Service, even to the extent of turning over to them the sanitary control of our port. Those of you who know the enormity of this agency in our city life can appreciate what this meant. The project was defeated. Can any of you surmise why, when the great body of our practitioners wished it? Again the subtle workings of Bacillus harbordensei.

I should like to ask General Cumming whether his wonderful organization has felt a lack of cooperation on the part of the practitioners of my city toward the activities of his workers. I do not believe it possible, and as I said at the outset of my paper, I think that I know my practicing colleagues of New York.

It seems to me that it is a very simple matter to readjust our differences and to bring to us the whole hearted support of the public. We need them, they need us. We particularly need their money, for we are a poor people financially—we give already, perhaps, too much of ourselves and of our funds to the unfortunate. Let us do all in our power to unite the public to us, let us acquaint them with our purposes, with our needs, let us invite them into our confidence. Let us frankly give our ideas to the public press, let us warrant in every way the full confidence of those whom we serve. Please remember, however, that every one of our public has his doctor, and that he has not and cannot have a higher opinion of the profession than he has of his own doctor. We and our reputation in every respect are absolutely in the hands of the practicing physician. May it never be otherwise!

With all this, with the breaking down of our no longer necessary brahministic seclusion, let us not for one moment give up our professional ideals, our traditions and our ethics. If we do we become no more than business men. In the eyes of the public we still constitute a priesthood. This reputation has been built up on the example of the family practitioner. If we lose this we lose all, and most of all the confidence of the public whom we still seek to serve, yes, even more than the God of science.

I take it that this meeting is called for something constructive. To an astonishing degree the American Medical Association possesses the confidence of the physicians of this land. It is our professional republic, a rule of ourselves by ourselves. What can the American Medical Association do to solve this problem?

It seems to me that the answer is a simple one, though the trail is rough and the desired objective far ahead. There are many wire entanglements, difficult trenches to take, machine gun nests to dislodge, and in many instances a well organized resistance against the "Medical Trust"—that is, against us, serious minded, progressive and ethical men who make up this organization. There are many Elijahs, mostly of the Bryanesque type, commanding against us. Old "Gen-

1. "The Perils of Magnanimity," editorial, J. A. M. A. **88**: 726 (March 5) 1927.

2. The Physician's Responsibility in Preventive Medicine, editorial, J. A. M. A. **88**: 484 (Feb. 12) 1927.

eral Reformer" has already laid down his barrage against us; heaven knows what he is going to do without the doctor when he has so hemmed us in by restrictions and decimated us by levies that we have as a profession become entirely secularized. But that does not concern him. It does concern us and our future usefulness.

Let us win the enemy over to us by concerted action by the same devoted and disinterested zeal which has always typified the profession, and to which alone is progress in medical science due.

Let this great body insist on the control of its own members. Let it demand that it, and not the zealous amateur, shall control our education, our position in this nation, and even our discussion of medical matters.

Let us through our state and county societies, under the direction of the great parent body, enlist every member in the work of public health. Let us invite the cooperation of every honest lay body; but we must dominate and insist that the professional standards which have made medicine shall still prevail, and that medical science shall still control medicine, in all its applications.

Through our medical organizations let us detail lecturers for public occasions. Through our own authorized members let us give out to the public press of the land authoritative statements of such an enlightening character that the public will listen and take heed.

Let us take over the city, the county and the state public health organizations; too many of them are now taking us over. Let us teach our students and young practitioners the essentials of public health as we now teach them an outline of medicine, of therapeutics and of surgery. Let us in general so prepare ourselves that we are qualified to act as public health officers. Then, and then only, shall we be able to take over and to control public health in its every aspect. But we must demand at all times that the traditions and ethics of medicine shall be respected, that only the competent shall rule.

I believe that the intelligent public is really with us. I believe that they are more than willing to meet us half way, and to devote under scientific professional control the enormous sums which are now dissipated at a tremendous economic waste, mostly under the debauched name of "charity." Encourage in public health such leaders and creators as we have developed in bacteriology, in chemistry, in physics, in surgery, in physiology and in all other essential components of medicine. Insist that they shall also enjoy a commensurate reward financially, and the dignity of a professional, and not of a social or political, position. This cannot be achieved except through professional control.

Finally, may I say for the practitioners of New York that we are back of every sensible measure of accredited preventive medicine. We are more than willing to play our essential part in the program of public medicine. We are not, however, a class prone to accept without due consideration the vaporings of every volunteer amateur Moses. We are prepared and waiting for the leadership of qualified, scientific medicine in this great undertaking. We shall as a body welcome the control of this great project by accredited representatives of American medicine, whether it be by the American Medical Association or by any other similar body of equal ability and proved authority, if such other there be.

STUDIES IN THE EPIDEMIOLOGY OF RHEUMATIC FEVER

ANNUAL INCIDENCE IN SOME HOSPITALS IN THE UNITED STATES, ITS POSSESSIONS, AND CANADA*

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Recent studies [1] on the geographic distribution of rheumatic fever in the United States have shown that the incidence of the disease is greater in the northern than in the southern regions of the country. Owing to the fact that rheumatic fever is not a reportable disease, it is necessary to utilize hospital records or mortality statistics to obtain information regarding its frequency. Therefore Harrison and Levine studied hospital admission rates for rheumatic fever in a number of cities in the Northern and Southern states and found that "rheumatic fever and rheumatic heart disease are much more common in Boston than in Richmond, Oklahoma City, New Orleans and Galveston. Baltimore and St. Louis occupy intermediate points." Faulkner and White, in their studies, have investigated hospital reports from different parts of the world. They state that their observations "are valuable chiefly in showing what wide differences do exist in different parts, and in suggesting that colder and wetter countries or districts tend to have a higher incidence."

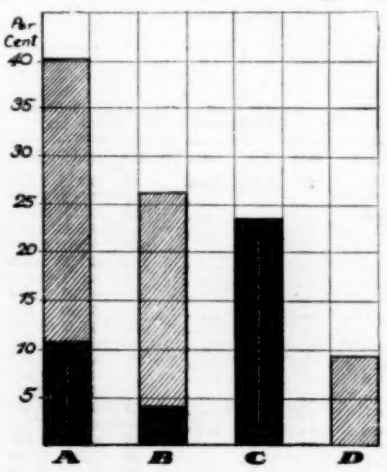

Chart 1.—Replies received from ninety-four hospitals to which rheumatic fever questionnaire was sent: *A*, percentage of hospitals supplying utilizable data; *B*, percentage of hospitals supplying incomplete or unsatisfactory data; *C*, percentage of hospitals reporting "information not available"; *D*, percentage of hospitals not replying. The percentage of each group of hospitals returning the dollar bill is indicated in black.

These authors did not attempt to describe the yearly variations in the incidence of the disease, for they give only one figure for each hospital, which represents the average yearly incidence of rheumatic fever for the number of years investigated. Since Hirsch,[2] Newsholme [3] and Pribram [4] have pointed out the cyclic character in the incidence of the disease, this method of averaging the annual frequency figures does not give

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1. Faulkner, J. M., and White, P. D.: The Incidence of Rheumatic Fever, Chorea, and Rheumatic Heart Disease with Especial Reference to Its Occurrence in Families, J. A. M. A. **83**: 425-426 (Aug. 9) 1924. Harrison, T. R., and Levine, S. A.: Notes on the Regional Distribution of Rheumatic Fever and Rheumatic Heart Disease in the United States, South. M. J. **17**: 914-915 (Dec.) 1924. Wood, J. E., Jr.; Jones, T. D., and Kimbrough, R. D.: The Etiology of Heart Disease: A Clinical Study of Six Hundred and Twenty-Three Cases with Certain Observations on Race and Climate, Am. J. M. Sc. **172**: 185-194 (Aug. 1) 1926.

2. Hirsch, A.: Handbuch der historisch-geographisch Pathologie, Erlangen, Ferdinand Enke **1**: 583, 1860.

3. Newsholme, Arthur: The Milroy Lecturers on the Natural History and Affinities of Rheumatic Fever: A Study in Epidemiology, Lancet **1**: 589, 657, 1895.

4. Pribram, A.: Der akute Gelenkrheumatismus, in Nothnagel's Specielle Pathologie und Therapie, Vienna, A. Hoelder **5**, part 2, 1899.

any conception of the variation in the rate of the disease over a series of years.

Extensive studies of the geographic distribution of rheumatic fever have been carried on in the British Isles, where the disease is believed to be especially common. On the one hand there is the school [5] which adheres to the belief that the high rates in the incidence of this disease are associated with low annual rainfall, and indirectly with the diminished ground water. In contradistinction to this point of view, other workers [6] have presented evidence which suggests that the highest incidence of the disease is in the damp, rainy and cold regions in the geographic areas they investigated.

Our study has concerned itself with an attempt to determine the annual incidence of rheumatic fever over a significant period of years in a representative group of hospitals in the United States, its possessions, and Canada. It is by necessity an unfinished piece of work because of the difficulties encountered in gathering a representative portion of the vast material required for the development of reliable conclusions. However, the data are presented in the hope that they may act as a nucleus to which more material will be added.

Rheumatic Fever Admissions, Total

	St. Vincents Portland, Ore.			Good Samaritan Portland, Ore.			Vancouver Gen. Vancouver B. C.			Winnipeg General Winnipeg, Man.			Ancker St. Paul			Minneapolis Gen. Minneapolis			Royal Victoria Montreal		
Year	RF	TA	MA	RF	TA	MA	RF	TA	MA	RF	TA	MA	RF	TA	MA	RF	TA	MA	RF	TA	MA
1925	55	5,557	1,237	44	8,239	2,316	43	13,823	2,203	130	12,239	2,457	14	7,981	.....	45	9,285	.....	44	9,199	2,434
1924	47	7,115	1,595	28	8,377	2,319	80	13,470	1,940	139	11,592	.....	33	8,131	.....	40	9,412	.....	31	9,070	2,228
1923	54	5,666	1,608	27	7,353	2,225	66	12,649	2,098	..	.....	.....	35	8,245	.....	25	9,166	.....	36	9,065	2,516
1922	49	5,571	1,625	38	7,153	2,223	98	12,413	2,367	..	.....	.....	10	7,525	.....	9	7,662	.....	26	9,136	2,154
1921	31	5,237	1,458	..	.....	.....	89	12,620	2,102	..	.....	.....	44	6,929	.....	24	6,702	.....	27	7,961	1,883
1920	20	5,118	1,410	..	.....	.....	114	13,714	3,093	..	.....	.....	71	6,550	.....	6	6,653	.....	39	8,081	1,993
1919	..	.....	.....	..	.....	.....	88	12,999	2,793	..	.....	.....	64	6,595	.....	36	6,643	.....	20	8,136	1,989
1918	..	.....	.....	..	.....	.....	23	13,375	2,127	..	.....	.....	90	7,659	.....	50	6,116	.....	19	7,940	2,662
1917	..	.....	.....	..	.....	.....	145	11,190	2,051	..	.....	.....	78	7,592	.....	146	6,554	.....	22	7,599	2,045
1916	..	.....	.....	..	.....	.....	76	8,331	.....	..	.....	.....	132	6,815	.....	143	6,249	.....	23	6,075	1,425
1915	..	.....	.....	..	.....	.....	69	6,841	.....	..	.....	.....	137	6,302	.....	40	6,140	.....	33	5,421	1,477
1914	..	.....	.....	..	.....	.....	85	5,939	.....	..	.....	.....	105	5,765	.....	53	5,602	.....	64	5,617	1,545
1913	..	.....	.....	..	.....	.....	93	5,248	.....	..	.....	.....	82	5,471	.....	54	3,705	.....	85	5,813	1,548
1912	..	.....	.....	..	.....	.....	131	4,971	.....	..	.....	.....	78	4,312	.....	28	3,028	.....	61	5,566	1,496
1911	..	.....	.....	..	.....	.....	158	5,125	.....	..	.....	.....	117	4,684	.....	..	.....	.....	53	4,673	1,475
1910	..	.....	.....	..	.....	.....	107	3,938	.....	..	.....	.....	94	6,950	.....	..	.....	.....	41	4,309	1,432
1909	..	.....	.....	..	.....	.....	65	3,042	.....	..	.....	.....	81	4,101	.....	..	.....	.....	29	4,200	1,394
1908	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	97	3,022	.....	..	.....	.....	42	3,706	1,226
1907	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	54	3,398	1,131
1906	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	48	3,444	1,195

	Lenox Hill New York			Jersey City Jersey City			Mass. General Boston			P. B. Brigham Boston			San Francisco San Francisco			Denver General Denver			State University Oklahoma City		
Year	RF	TA	MA	RF	TA	MA	RF	TA	MA	RF	TA	MA	RF	TA	MA	RF	TA	MA	RF	TA	MA
1925	50	6,327	1,733	60	11,229	2,802	32	6,682	2,735	48	4,422	2,026	30	9,113	2,310	39	6,133	1,681	0	3,931	1,491
1924	67	6,060	1,702	..	.....	.....	34	6,882	2,808	39	4,658	2,312	34	8,163	2,586	19	5,930	1,664	0	3,911	1,558
1923	36	5,722	1,636	..	.....	.....	18	6,531	2,625	30	4,775	2,502	36	7,612	2,208	..	.....	.....	2	3,373	1,261
1922	..	.....	.....	..	.....	.....	40	6,659	2,713	31	4,685	2,649	32	7,863	2,310	..	.....	.....	1	3,560	1,708
1921	..	.....	.....	..	.....	.....	32	6,585	2,633	20	4,315	2,348	30	6,903	2,057	..	.....	.....	..	.....	.....
1920	..	.....	.....	..	.....	.....	19	6,185	2,358	17	4,316	2,446	29	6,246	2,187	..	.....	.....	..	.....	.....
1919	..	.....	.....	..	.....	.....	24	6,074	2,399	22	4,282	2,411	..	.....	.....	..	.....	.....	..	.....	.....
1918	..	.....	.....	..	.....	.....	37	6,702	2,664	38	4,025	2,333	..	.....	.....	..	.....	.....	..	.....	.....
1917	..	.....	.....	..	.....	.....	32	6,699	2,427	35	3,674	1,878	..	.....	.....	..	.....	.....	..	.....	.....
1916	..	.....	.....	..	.....	.....	31	6,507	2,562	45	3,712	1,925	..	.....	.....	..	.....	.....	..	.....	.....
1915	..	.....	.....	..	.....	.....	24	6,503	2,678	36	3,417	1,734	..	.....	.....	..	.....	.....	..	.....	.....
1914	..	.....	.....	..	.....	.....	27	6,413	2,418	40	4,213	2,072	..	.....	.....	..	.....	.....	..	.....	.....
1913	..	.....	.....	..	.....	.....	52	6,215	2,463	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....
1912	..	.....	.....	..	.....	.....	76	6,629	2,612	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....
1911	..	.....	.....	..	.....	.....	51	6,495	2,460	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....
1910	..	.....	.....	..	.....	.....	60	6,092	2,159	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....
1909	..	.....	.....	..	.....	.....	37	5,871	2,059	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....
1908	..	.....	.....	..	.....	.....	56	5,362	2,008	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....
1907	..	.....	.....	..	.....	.....	79	5,517	2,119	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....
1906	..	.....	.....	..	.....	.....	28	5,075	1,919	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....

	St. Vinc. de Paul Norfolk, Va.			San Diego Co. Gen. San Diego, Calif.			Baylor Dallas, Texas			John Sealy Galveston, Tex.			Charity New Orleans			Touro Infirmary New Orleans			Hillman Birmingham, Ala.		
Year	RF	TA	MA	RF	TA	MA	RF	TA	MA	RF	TA	MA	RF	TA	MA	RF	TA	MA	RF	TA	MA
1925	10	16,688	5,562	6	4,383	1,461	9	10,707	3,560	4	4,982	1,111	32	25,953	7,620	2	9,494	.....	6	5,813	1,099
1924	5	15,735	5,245	..	.....	.....	5	9,973	3,324	1	4,539	1,036	21	24,224	6,805	2	8,118	.....	0	5,538	944
1923	4	15,581	5,193	..	.....	.....	1	8,981	2,960	1	3,812	934	9	20,565	5,842	2	7,856	.....	0	4,759	849
1922	2	15,533	5,177	..	.....	.....	1	7,441	2,480	2	3,871	1,026	15	17,279	5,042	3	7,632	.....	2	3,850	.....
1921	8	12,689	4,229	..	.....	.....	2	6,709	2,236	0	4,171	915	7	17,309	5,332	2	7,757	.....	0	3,625	.....
1920	5	9,689	3,229	..	.....	.....	2	9,077	3,025	1	4,148	1,003	23	15,999	5,181	..	.....	.....	0	3,150	.....
1919	..	.....	.....	..	.....	.....	0	7,679	2,559	0	3,963	953	26	17,148	6,025	..	.....	.....	1	3,442	.....
1918	..	.....	.....	..	.....	.....	..	.....	.....	0	4,961	1,616	24	19,221	8,553	..	.....	.....	1	3,606	998
1917	..	.....	.....	..	.....	.....	..	.....	.....	0	3,877	1,103	32	19,594	7,637	..	.....	.....	1	4,055	1,147
1916	..	.....	.....	..	.....	.....	..	.....	.....	0	3,621	1,120	49	18,651	6,765	..	.....	.....	..	.....	.....
1915	..	.....	.....	..	.....	.....	..	.....	.....	0	3,085	1,131	54	17,823	6,720	..	.....	.....	..	.....	.....
1914	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	41	16,742	6,368	..	.....	.....	..	.....	.....
1913	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	49	14,349	5,477	..	.....	.....	..	.....	.....
1912	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	65	12,983	5,102	..	.....	.....	..	.....	.....
1911	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	67	12,220	4,600	..	.....	.....	..	.....	.....
1910	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	91	11,313	4,537	..	.....	.....	..	.....	.....
1909	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	47	9,576	3,792	..	.....	.....	..	.....	.....
1908	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	57	9,540	4,327	..	.....	.....	..	.....	.....
1907	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	31	8,850	3,768	..	.....	.....	..	.....	.....
1906	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	29	8,452	3,340	..	.....	.....	..	.....	.....

5. Newsholme (footnote 3). Longstaff, G. B.: A Contribution to the Aetiology of Rheumatic Fever, Tr. Epidemiol. Soc. London, N. S. **24**: 33, 1905. Church, W.: Rheumatic Fever, in Allbutt and Rolleston's System of Medicine **2**: 594, 1906. Greenwood, M., and Thompson, T.: On Meteorological Factors in the Aetiology of Acute Rheumatism, J. Hyg. **7**: 171, 1907.

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METHOD

A group of ninety-four general hospitals distributed throughout the United States, its possessions, and Canada were selected from the American Medical Directory as the source of the data. In choosing the series, hospitals of long standing, with more than 200 beds and with teaching affiliations, were given the pref-

erence. Institutions devoted primarily to the treatment of tuberculosis, mental diseases, chronic invalids and the like were excluded.

The collection of data was carried out in the following manner: A letter stating the purposes of the epidemiologic survey was sent to the superintendents of the hospitals selected for study or, in some cases, to the chief medical officer or professor of medicine. This letter contained a form of five columns to be filled in by a clerk in the record room. The captions of the columns were: Year (1875 to 1925); Number of Cases of Rheumatic Fever; Number of Cases of Chorea; Total Number of Admissions to the Medical Wards; Total Number of Admissions to All the Hospital Wards. Directions were given that only clinically diagnosed cases of rheumatic fever and Sydenham's chorea admitted to the house were to be included in the report. A dollar bill was enclosed with the form for the remuneration of the clerk who might perform the task. From our own experience we had found that the work could be completed in approximately one hour.

By accepting statistics for cases admitted only to the house, the possibility of determining the number of individuals with these diseases who were being treated in the outpatient departments was precluded. Although such information might have been extremely valuable, the index systems and character of diagnosis in the majority of outpatient departments made it advisable to exclude such material from our study.

The response to this letter and a series of follow-up communications is graphically shown in chart 1. Of ninety-four requests for information, thirty-eight, or 40.5 per cent, responded with data which were utilized in the survey. Of this group, 29 per cent returned the dollar bill. A second group of twenty-five, or 26.5 per cent of the total, returned forms which were incomplete or unsatisfactory. Of this number 16 per cent returned the money. A third group of twenty-two, or 23.5 per cent, returned the dollar bill with the statement

Admissions, and Admissions to Medical Wards *

Montreal General Montreal			City Cleveland			Harper Detroit			Toronto General Toronto			Albany Albany, N. Y.			Bellevue New York			Presbyterian New York			
RF	TA	MA	RF	TA	MA	RF	TA	MA	RF	TA	MA	RF	TA	MA	RF	TA	MA	RF	TA	MA	Year
30	6,222	.....	78	10,418	1,905	-10	17,474	1,645	38	11,115	2,674	10	7,336	1,753	323	48,066	.....	104	3,343	1,688	1925
43	6,125	1,325	63	8,385	1,468	16	16,593	1,406	55	11,483	2,612	4	7,445	1,861	426	47,985	.....	101	3,518	1,704	1924
24	6,821	1,595	57	7,461	1,315	9	16,240	1,475	40	10,918	2,883	12	6,585	1,616	355	45,258	.....	67	3,320	1,584	1923
46	6,502	1,459	26	7,260	1,378	..	.....	.....	20	10,393	2,277	..	.....	.....	337	45,671	.....	50	3,496	1,827	1922
40	6,046	1,477	47	6,037	1,216	..	.....	.....	18	10,938	2,333	..	.....	.....	296	43,597	.....	60	3,430	1,832	1921
49	5,810	1,621	21	5,908	.....	..	.....	.....	..	.....	.....	..	.....	.....	297	38,940	.....	55	3,677	1,807	1920
19	5,793	.....	11	6,124	.....	..	.....	.....	..	.....	.....	..	.....	.....	197	38,850	.....	59	4,001	2,256	1919
28	7,295	.....	15	7,020	.....	..	.....	.....	..	.....	.....	..	.....	.....	224	42,533	.....	35	3,699	1,798	1918
74	7,665	.....	84	7,191	.....	..	.....	.....	..	.....	.....	..	.....	.....	457	45,470	.....	55	3,868	1,849	1917
72	8,134	.....	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	394	45,422	.....	56	3,699	1,807	1916
47	7,860	2,631	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	475	44,485	.....	42	3,401	1,473	1915
35	5,510	.....	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	581	43,297	.....	..	.....	.....	1914
16	4,939	1,655	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	488	41,376	.....	..	.....	.....	1913
..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	432	40,264	.....	..	.....	.....	1912
..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	531	37,578	.....	..	.....	.....	1911
..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	589	40,227	.....	..	.....	.....	1910
..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	511	36,330	.....	..	.....	.....	1909
..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	630	33,942	.....	..	.....	.....	1908
..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	706	33,224	.....	..	.....	.....	1907
..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	444	27,178	.....	..	.....	.....	1906

Kansas City Gen. Kansas City, Mo.			City St. Louis			City No. 2 (col.) St. Louis			Memphis General Memphis, Tenn.			Baptist Memorial Memphis, Tenn.			Louisville City Louisville, Ky.			Johns Hopkins Baltimore			
RF	TA	MA	RF	TA	MA	RF	TA	MA	RF	TA	MA	RF	TA	MA	RF	TA	MA	RF	TA	MA	Year
3	6,801	.....	47	16,283	.....	18	6,652	2,432	9	6,732	2,433	2	11,103	1,769	19	7,255	1,177	34	.....	1,775	1925
9	6,647	.....	38	15,556	.....	20	6,230	2,751	10	6,625	2,531	5	11,599	2,030	27	7,395	1,352	15	.....	1,825	1924
3	6,189	.....	42	16,034	.....	0	5,087	2,017	4	5,795	3,145	3	10,659	1,705	..	.....	.....	9	.....	1,980	1923
3	5,275	.....	39	16,053	.....	8	4,127	1,485	10	5,061	1,728	4	9,073	1,452	..	.....	.....	19	.....	1,869	1922
9	4,864	.....	24	14,471	.....	7	4,221	1,482	12	5,057	.....	2	8,034	1,285	..	.....	.....	21	.....	1,818	1921
2	4,431	.....	36	11,891	.....	6	3,559	1,210	3	4,323	.....	2	7,807	1,264	..	.....	.....	8	.....	1,941	1920
..	.....	.....	43	13,031	.....	..	.....	.....	8	4,643	.....	..	.....	.....	..	.....	.....	2	.....	2,006	1919
..	.....	.....	55	17,685	.....	..	.....	.....	5	4,620	.....	..	.....	.....	..	.....	.....	17	.....	1,946	1918
..	.....	.....	127	17,980	.....	..	.....	.....	5	4,710	.....	..	.....	.....	..	.....	.....	5	.....	1,811	1917
..	.....	.....	126	18,389	.....	..	.....	.....	8	4,291	.....	..	.....	.....	..	.....	.....	22	.....	1,635	1916
..	.....	.....	120	17,138	.....	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	10	.....	1,626	1915
..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	19	.....	1,723	1914
..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	1913
..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	1912
..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	1911
..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	1910
..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	1909
..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	1908
..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	1907
..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	1906

University Augusta, Ga.			Roper Charleston, S. C.			Philippine Gen. Manila, P. I.			The Queen's Honolulu, Hawaii			Ancon Panama Canal			
RF	TA	MA	RF	TA	MA	RF	TA	MA	RF	TA	MA	RF	TA	MA	Year
0	5,213	2,105	4	3,785	1,976	13	12,708	3,268	5	4,987	2,685	17	8,200	.....	1925
3	4,708	2,227	2	3,468	1,770	11	12,644	3,144	..	.....	.....	21	7,526	.....	1924
0	4,285	2,236	2	3,563	1,808	17	12,138	2,849	..	.....	.....	17	6,455	.....	1923
2	3,802	1,704	0	3,370	.....	17	10,155	2,500	..	.....	.....	7	6,313	.....	1922
2	3,667	1,692	0	3,339	.....	14	9,153	2,444	..	.....	.....	20	8,258	.....	1921
0	3,992	1,747	..	.....	.....	10	9,360	2,711	..	.....	.....	9	9,932	.....	1920
1	4,501	2,529	..	.....	.....	7	9,405	2,885	..	.....	.....	15	10,556	.....	1919
..	.....	.....	..	.....	.....	16	9,864	3,293	..	.....	.....	11	12,405	.....	1918
..	.....	.....	..	.....	.....	17	8,939	2,672	..	.....	.....	3	11,047	.....	1917
..	.....	.....	..	.....	.....	30	7,258	2,121	..	.....	.....	13	9,261	.....	1916
..	.....	.....	..	.....	.....	47	7,144	2,849	..	.....	.....	17	10,844	.....	1915
..	.....	.....	..	.....	.....	41	7,198	3,013	..	.....	.....	44	15,356	.....	1914
..	.....	.....	..	.....	.....	52	6,732	2,985	..	.....	.....	13	21,855	.....	1913
..	.....	.....	..	.....	.....	44	6,992	3,223	..	.....	.....	53	20,882	.....	1912
..	.....	.....	..	.....	.....	27	6,317	2,679	..	.....	.....	78	21,987	.....	1911
..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	128	20,167	.....	1910
..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	61	18,531	.....	1909
..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	139	15,738	.....	1908
..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	141	14,012	.....	1907
..	.....	.....	..	.....	.....	..	.....	.....	..	.....	.....	101	13,171	.....	1906

* The yearly number of cases of rheumatic fever (RF); the yearly total hospital ward admissions (includes medical and surgical admissions) (TA), and the yearly medical ward admissions (MA) in forty hospitals in the United States, its possessions and Canada.

that their record system made it impossible or too difficult to gather the desired information. The fourth group, numbering nine, or 9.5 per cent of the total, failed to reply to our letter and follow-up communications.

The data from the second group of twenty-five hospitals were considered incomplete or unsatisfactory on the basis of one or more of the following criteria:

1. Less than 1,000 medical admissions, or 3,000 total admissions per annum.
2. Data covering a period of less than a year.
3. The obvious inaccuracy of the figures.
4. An expression of uncertainty from the sender of the report as to the validity of the information.

pital classified only a portion of its rheumatic fever cases as such, the remainder being grouped under the headings: "Acute Articular Rheumatism," "Acute Rheumatism," "Acute Arthritis" and "Acute Polyarthritis." Since the error could not be rectified, all the material was excluded from this report. A similar difficulty was found to exist in three Philadelphia hospitals. Here the divergence of rates for the disease in the various institutions seems to rest, in part at least, on selection of cases. In this instance, it was again felt advisable to discard the data for the entire city.

Two hospitals reported rates of rheumatic fever lower than that for chorea. Since this fact is contrary to what is known of the relative hospital frequency of

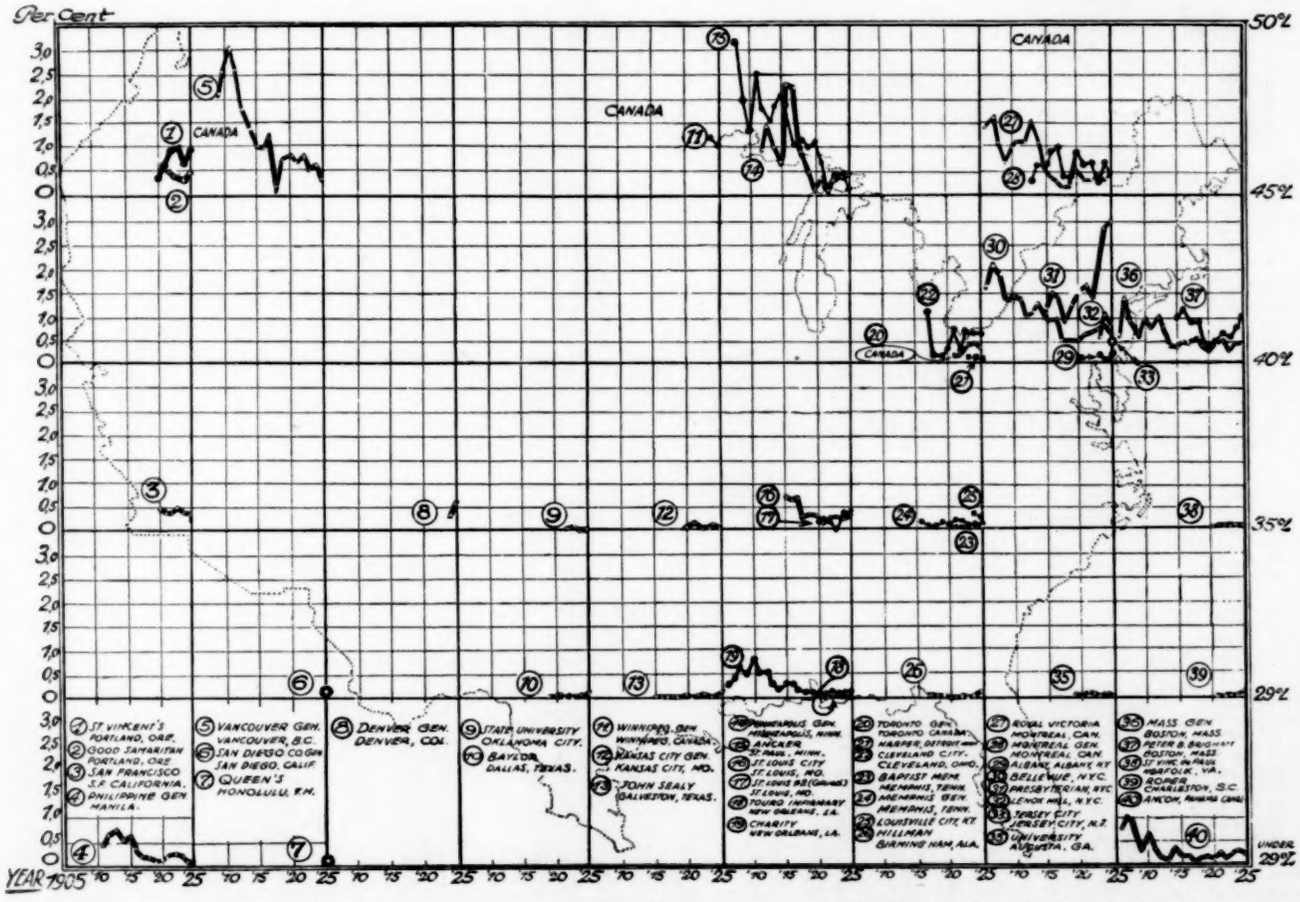
Per Cent
50%
45%
40%
35%
29%
UNDER 29%
YEAR 1905
CANADA
CANADA
CANADA
CANADA
1 ST VINCENT'S PORTLAND, ORE.
2 GOOD SAMARITAN PORTLAND, ORE
3 SAN FRANCISCO S.F. CALIFORNIA
4 PHILIPPINE GEN MANILA
5 VANCOUVER GEN. VANCOUVER, B.C.
6 SAN DIEGO CO GEN SAN DIEGO, CALIF.
7 QUEEN'S HONOLULU, T.H.
8 DENVER GEN. DENVER, COL.
9 STATE UNIVERSITY OKLAHOMA CITY.
10 BAYLOR DALLAS, TEXAS.
11 WINNIPEG GEN WINNIPEG, CANADA
12 KANSAS CITY GEN. KANSAS CITY, MO.
13 JOHN SEALY GALVESTON, TEXAS.
14 MINNEAPOLIS GEN MINNEAPOLIS, MINN.
15 ANCKLEN ST. PAUL, MINN.
16 ST. LOUIS CITY ST. LOUIS, MO.
17 ST. LOUIS MB (Colored) ST. LOUIS, MO.
18 TOURO INFIRMARY NEW ORLEANS, LA.
19 CHARITY NEW ORLEANS, LA.
20 TORONTO GEN TORONTO, CANADA
21 HARPER, DETROIT and CLEVELAND CITY, CLEVELAND, OHIO.
22 BAPTIST MEM. MEMPHIS, TENN.
23 MEMPHIS GEN MEMPHIS, TENN.
24 LOUISVILLE CITY, KY.
25 HILLMAN BIRMINGHAM, ALA.
26 ROYAL VICTORIA MONTREAL, CAN.
27 MONTREAL GEN. MONTREAL, CAN.
28 ALBANY, ALBANY, N.Y.
29 BELLEVUE, N.Y.C.
30 PRESBYTERIAN, N.Y.C.
31 LENOX HILL, N.Y.C.
32 JERSEY CITY JERSEY CITY, N.J.
33 UNIVERSITY AUGUSTA, GA.
34 MASS GEN. BOSTON, MASS.
35 PETER B. BRIGHAM BOSTON, MASS.
36 ST. VINC. ON PAUL NORFOLK, VA.
37 ROPER CHARLESTON, S.C.
38 ANCON, PANAMA CANAL

Chart 2.—Percentage of annual total admissions (includes medical and surgical) diagnosed as rheumatic fever in forty hospitals in the United States, its possessions, and Canada. Each curve in the larger squares represents an individual hospital which is situated in its approximate geographic location. The name of each hospital appears in the lowest set of squares. Note the highest percentages of rheumatic fever in the northern latitude areas as contrasted with those in the South.

Those reports which showed striking variations in the rate of incidence of rheumatic fever in several hospitals in the same city were investigated with regard to the accuracy of their figures. A series of follow-up letters was sent in an effort to obtain satisfactory correction of the questionable data. When it was found impossible to make the returns compatible, the figures for the entire city were discarded. There were six hospitals in this group, three in Philadelphia and three in Chicago. In the latter city, the markedly divergent results were found to be due to different methods of classification of the disease. For instance, one hospital included all its cases of rheumatic fever under the heading "Acute Arthritis." It was impossible to determine how many of the cases included in this category were actually gonococcal, streptococcal or other forms of arthritis. On the other hand, another Chicago hospital the two conditions, and since other hospitals reported many more cases of rheumatic fever than chorea, we considered the data from these two hospitals of questionable accuracy and therefore discarded the material.

The variable returns for the incidence of chorea made it seem highly probable that these figures depended on the size of the children's wards in connection with the hospital. These figures are therefore not included in our study. They were useful, however, in judging the accuracy of the figures submitted for rheumatic fever incidence, as before described.

PRESENTATION OF DATA

The presentation of the material from the thirty-eight hospitals submitting acceptable data and the two Boston hospitals which were personally canvassed, a total of forty hospitals, is accomplished by means of

the accompanying table and charts 2 and 3. The table presents the figures for rheumatic fever admissions, total admissions to all the hospital wards, and total admissions to only the medical wards for the years 1906 through 1925 for each hospital.

Charts 2 and 3 are similar to each other in their construction. They contain graphs for each of the hospitals of our series. These individual graphs are plotted in their appropriate place in one of the forty-five larger squares which have been superimposed on a map of the United States. The graph for each hospital lies approximately in its correct geographic location. The abscissas, or base lines, correspond to the latitudes 45°, 40°, 35°, 29°, and "under 29°." Every hospital whose graph has 40° as a base line is situated either at 40° latitude or between 40° and 45°, and so for the other latitudes. The abscissas are divided into years extending from 1905 through 1925. The ordinates are divided into intervals representing the percentage of rheumatic fever admissions in terms of either the annual total admissions (chart 2) or the annual medical admissions (chart 3).

Those squares in the charts which lie on the Eastern Seaboard often contain more than one graph, while many in the Middle West contain no graph. The latter condition is due to the fact that we were unable to procure reliable data from these thinly settled areas. There are five Canadian hospitals which are accordingly designated. In the lowest squares are graphs from a Philippine, a Hawaiian and a Panama Canal Zone hospital. The number opposite each curve will be found again in the lowest squares, accompanied by the name and location of the hospital supplying the material from which the curve was constructed.

The original data are to be found in the table. The hospital reports are so arranged in the table that they correspond in position with the graphs on the charts, reading from left to right.

Chart 2 is entitled "percentage of total admissions (includes medical and surgical) diagnosed as rheumatic fever." To obtain the percentages which are here graphically represented, the number of cases of rheumatic fever admitted yearly to each hospital was divided by the total number of patients admitted to all the hospital wards during the same year. Chart 3, entitled "percentage of annual medical admissions diagnosed as rheumatic fever," is prepared in the same manner from the annual number of cases of rheumatic fever and the medical admissions.

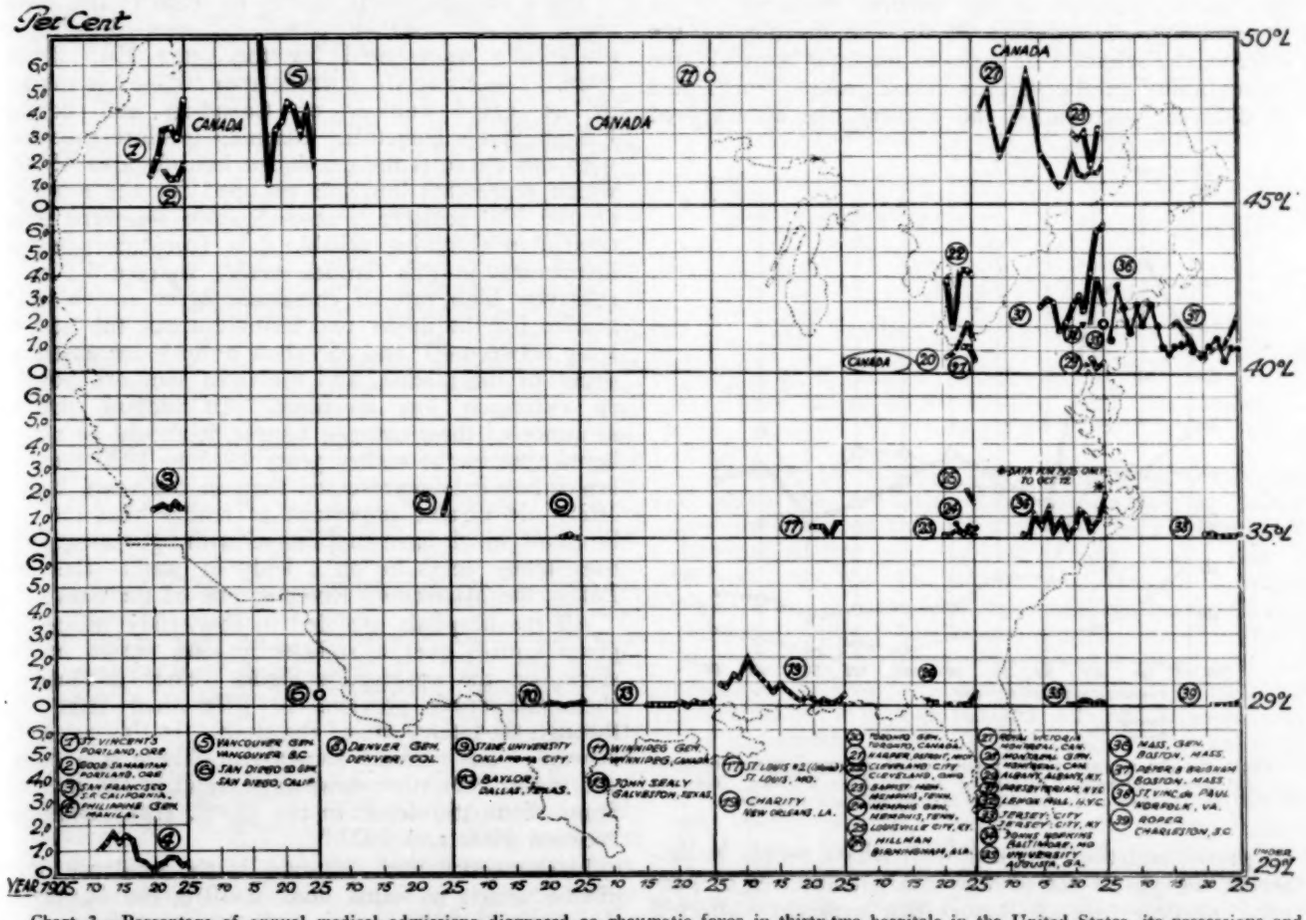

Chart 3.—Percentage of annual medical admissions diagnosed as rheumatic fever in thirty-two hospitals in the United States, its possessions and Canada. Each curve in the larger squares represents an individual hospital which is situated in its approximate geographic location. The name of each hospital appears in the lowest set of squares. Note that the percentage of rheumatic fever is greater in the northern latitude areas than in the southern.

Eight of the hospitals were unable to supply figures for the medical ward admissions, although they did submit figures for the total ward admissions. It is for this reason that it was necessary to present the rheumatic fever figures in terms of both medical and total ward admissions. The incidence of a medical disease when estimated in terms of the total admissions to all the hospital wards is likely to be badly distorted, as one hospital may have large obstetric, neuropsychiatric, tuberculous and contagious services while another has only medical and surgical wards. This, of course, means that a comparison of the incidence of rheumatic fever in terms of total hospital admissions in two such

hospitals would give a false view of its relative prevalence in the two institutions. However, the curves from those hospitals which are represented in both charts 2 and 3 are of the same form and usually of the same relative magnitude. Therefore, the percentage of rheumatic fever in terms of total ward admissions for the eight hospitals represented only in chart 2 is probably sufficiently accurate to give an indication of the prevalence of the disease in these hospitals.

COMMENT

In any biologic experiment there are many variables which make perfect uniformity in the results impossible. Such variables have been particularly numerous in this survey because of the general character of the undertaking. Differences in the classification of the disease, the selection of cases in teaching hospitals, the susceptibility of the various racial groups represented in different portions of the country, the accuracy of

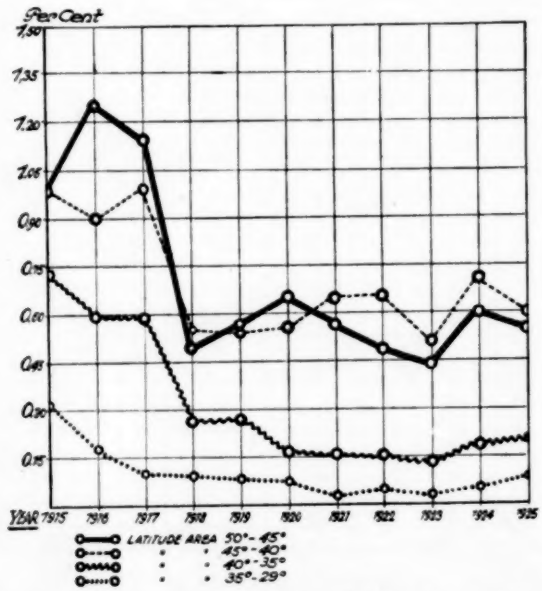

Chart 4.—The average yearly percentage of rheumatic fever in terms of total hospital admissions in each of the four latitude areas. Note the fall in the incidence of the disease in 1918 in all the latitude areas.

diagnosis, and the readiness with which people in different regions of the country avail themselves of hospital privileges are all factors that may have affected the figures. These influences can scarcely be evaluated in estimating the significance of some of this information, and therefore a considerable reserve must be manifested in drawing conclusions from these data, which are by necessity of a limited order.

Inspection of charts 2 and 3 demonstrates that rheumatic fever is present in varying percentages in all the hospitals of our series. Its frequency, however, diminishes markedly and quite consistently as one travels from north to south. In most Southern and Near Southern hospitals, whose data are shown in the lower sets of graphs, the relatively flat curves close to the base line indicate that the incidence of rheumatic fever in hospitals in cities such as Dallas, Galveston, Oklahoma City, Kansas City, Memphis, Birmingham, Augusta and Charleston is very low. An inspection of the figures of these hospitals shows that despite the flatness of the curves there is, however, a yearly fluctuation in the rate of the disease. But with such a low incidence, the number of cases of rheumatic fever in a year may double or triple that of the preceding year without making any prominent change in the graph.

The relatively high rates of rheumatic fever in the Northern hospitals stand out in contrast to this picture in the South. In order to show this variation more simply, chart 4 was constructed. To obtain the figures for this chart the yearly rheumatic fever and total admission figures for all the hospitals lying in each of the upper four latitude divisions were added together and the average yearly rheumatic fever incidence, in terms of total hospital admissions, for each of the latitude areas concerned, was thus determined. The Philippine, Hawaiian and Panama Canal Zone hospitals were omitted from this chart.

These average yearly figures for each of the latitude areas 50°-45°, 45°-40°, 40°-35° and 35°-29° are graphically represented for the years 1915 through 1925. The curve for latitude area 50°-45° is made up of an equal number of Canadian and northern United States hospitals. Running in close association with this curve is the graph for latitude area 45°-40°, which represents hospitals grouped for the most part on the Northeastern seaboard, since we were unsuccessful in obtaining reliable data from more western institutions in this latitude area. In contrast to the relatively high rate of rheumatic fever shown by the graphs for the upper two latitude areas, the hospitals lying between 40° and 35° show a much decreased incidence of the disease, and the most southern hospitals an extremely low incidence. In judging the significance of these average figures, it should be remembered that in the earlier years 1915 to 1920 there are fewer hospitals represented than in the years 1920 to 1925. It is also important to realize that all those hospitals which have supplied us with figures extending over many years lie on a body of water—the Great Lakes, the Mississippi River or one of the coasts.

All the hospitals included in this study which have given figures over a sufficiently long period of time show, on the average, a higher yearly incidence of rheumatic fever previous to 1918 than from 1918 through the later years of the study. In this connection Atwater [7] has recently shown that "there is a definite and rather consistent downward trend in the mortality from rheumatic fever in the U. S. registration area between 1900 and 1923."

In connection with the drop in the incidence of the disease which is found here in 1918, the figures for rheumatic fever among enlisted men quoted by Faulkner and White [1] are of interest. Their data extend from 1913 through 1922. The average "admission ratio per thousand white enlisted men" in the United States for "acute rheumatic fever" for the years 1913 through 1918 is 6.69, while for 1919 through 1922 it is 2.47. In the period 1913-1922, the two years of highest incidence are 1917 and 1918. For the negro enlisted men, the average admission ratio for 1913 through 1918 is 6.11, and from 1919 through 1922, 3.45.

The four curves of chart 4 representing the average incidence of rheumatic fever for the four latitude areas are, practically speaking, flat from the year 1918 through 1923. During the last two years, 1924 and 1925, there has been a tendency toward an increased rate of the disease in some hospitals. This increase is most marked in the Presbyterian Hospital in

7. Atwater, R. M.: Studies in the Epidemiology of Acute Rheumatic Fever and Related Diseases in the United States, Based on Mortality Statistics, Am. J. Hyg. 7: 343-369 (May) 1927.

New York. We have been advised that this is not due to selection of cases. Other hospitals which show the same tendency are St. Vincent's, Portland, Ore.; Peter Bent Brigham, Boston, and Johns Hopkins, Baltimore. In chart 4 this rise is faintly indicated, but it will be necessary to have data for subsequent years before it can be known whether it is real or only apparent.

The rise in the incidence of the disease during the years 1924 and 1925 is more distinctly indicated in chart 5. Chart 5 is prepared in the same manner as chart 4, but presents the average percentage of rheumatic fever for the four upper latitude areas in terms of medical admissions. Because so few hospitals gave figures for their medical ward admissions over a longer period of time than six years, this chart covers only the years 1920 through 1925.

Swift,[8] in commenting on Lambert's[9] report that rheumatic fever was decreasing in frequency among patients admitted to Bellevue Hospital between the years 1906 and 1919, says:

> If the rheumatic fever is a specific infection, we would expect it, like other acute infectious diseases, to run in certain periodicity in incidence. . . . The influence of the influenza epidemic on the incidence of other acute diseases must be considered. Vital statistics have shown that there has been a marked falling off of tuberculosis, chronic cardiac disease, and other diseases, following the influenza epidemic. It is possible that patients who are subject to infection may have succumbed to influenza, and for that reason there are fewer such patients to contract rheumatic fever.

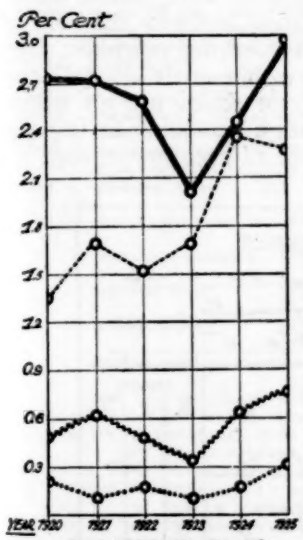

Chart 5.—The average yearly percentage of rheumatic fever in terms of medical hospital admissions in each of the four latitude areas. Note the rise in the incidence of the disease in the years 1924 and 1925.

Of the cyclic character of the disease, as described especially by Pribram[4] and Newsholme,[3] there is very little that can be said from the figures presented here. There are yearly fluctuations in the percentage of rheumatic fever patients received in each hospital. For instance, a particularly prominent jump in the incidence of the disease is reported for the years 1916 and 1917 at the Minneapolis General Hospital. Yearly fluctuations are much more marked in all the curves previous to the year 1915 than subsequently. If all the hospitals showed similar fluctuations in the same year, it might justifiably be called an epidemic. But since no two hospitals, even in the same city, consistently have their peaks of the disease at the same time, we do not attempt to explain the yearly fluctuations.

This material is presented not because it is considered complete or accurate but with the hope that we may receive correction of errors in the material presented, information from hospitals which have already submitted data that we have been unable to utilize because of variations of classification, and replies from hospitals with which we have not communicated.

8. Swift, H. F.: Rheumatic Fever, in Nelson's Medicine **1**, insert to p. 430.

9. Lambert, Alexander: The Incidence of Rheumatic Fever at Bellevue Hospital, J. A. M. A. **74**: 993 (April 10) 1920.

SUMMARY

1. The yearly admission rate for rheumatic fever in a selected series of hospitals in the United States and Canada is greater in the northern than in the southern regions of the continent.

2. In twelve out of fifteen hospitals supplying data for an adequate period of time, the average annual frequency of rheumatic fever previous to 1918 is greater than that subsequent to 1918.

3. Since the year 1918 the disease has not shown a uniform tendency to decrease in frequency in the hospitals of this series.

4. Our figures for the final two years of the study, 1924 and 1925, demonstrate an increased rate of rheumatic fever in some of the hospitals of the series. This change is most marked in the Presbyterian Hospital in New York. Other hospitals which show the same tendency are St. Vincent's, Portland, Ore.; Peter Bent Brigham, Boston, and Johns Hopkins, Baltimore.

AN EXPERIMENT IN THE APPLICATION OF DIABETIC DIETETICS

WITH REPORT ON ONE HUNDRED CASES

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BROOKLYN

Realizing the futility of the majority of efforts made to obtain the consent of the patient with mild diabetes to hospitalization that the necessary data essential for accurate dieting and treatment with insulin may be secured, and that the excuse most frequently offered was the loss of time from work and the incidental cost, the plan outlined herein was devised and has had a year of trial with results that seem to justify its continuance. A local organization consented to finance the experiment for a year, but the plan has financed itself and the demand for the service suggests the probability that it will continue.

In the center of the retail business section of the city was opened what is called a "Diabetic Dining Room." It is conducted by a clinician with the assistance of a competent dietitian who has had special training in diabetic dietetics. Records of more than a hundred cases are available for anlaysis. Patients are not accepted unless referred by a registered physician, and no treatment of any kind is suggested except in the report to the physician. If requested by the physician, the patron will be instructed in the administration of insulin.

It is thought that this is the first successful attempt to establish a center where the physician may obtain the desired information without greatly interfering with the patient's occupation. (Patients frequently state that they would have postponed the procedure if going to the hospital had been the alternative.) Furthermore, it is believed that such data are more informative of the patient's actual carbohydrate burning capacity than that secured from the artificial existence in the average hospital.

THE PLAN

Special effort is made to provide an attractive service. In addition to the standard foods, such delicacies as the market affords are served. This impresses the patients with the fact that they are not doomed to a routine. On admission, the normal basal metabolic rate

(Boothby and Sandiford) is determined, and instruction in food value calculation and in the "home testing" of urine is begun. A table of calorific values of the ordinary foods is supplied and the patient is required to memorize most of it—not a difficult task. A card prescribing carefully stipulated breakfasts to be taken

TEST DIET RULES

TO THE PATRON:

Your physician desires to know exactly how much carbohydrate food you are capable of metabolizing without artificial aid. These diets are designed to obtain this information as without it your physician cannot either provide you with an accurate diet or treat you effectively. It is, therefore, important that you cooperate with us, for these few days, following closely instructions given below

1. Take nothing in the form of food, (except the breakfast suggested below) or drink, (except water) outside the Dining Room.
2. Consume all food that is given you in the Dining Room.
3. Each mid-day bring with you a four ounce quantity of the previous day's urine being sure that the entire twenty-four hour output has been mixed before taking out the sample.
4. Mid-day meals will be served at twelve o'clock. Evening meals will be served at five o'clock. (A guest may accompany patron if desired.)

No meals served on Sundays or Holidays.

TEST DIET BREAKFASTS

FIRST DAY	1/2 Grapefruit 2 Thin slices bread 1 oz. Light Cream 1 Egg 1 Level Teaspoon Butter Tea or Coffee
SECOND DAY	1/2 Grapefruit Slice Bread 1 oz. Light Cream 1 Level Teaspoon Butter Tea or Coffee
THIRD DAY	1 Egg 1 Slice Bread 1 oz. Light Cream 1/2 Teaspoon Butter Tea or Coffee

Fig. 1.—Stipulated breakfasts and rules.

at home is provided (fig. 1), and the patient is told to follow carefully the stipulations and report the next day for his midday meal, when the actual dining room routine is begun. Only midday and evening meals are given in the dining room.

On the first day there is given a meal of low-value foods consisting of carbohydrate 100, protein 50 and fat 100, totaling 1,500 calories about equally divided into the three meals. The patient, previously instructed, collects the entire twenty-four hour output of urine and brings a sample when coming for the next day's midday meal. It was suspected at the start that this detail would be difficult of enforcement; but such has not been the experience, so much have the patients been interested in their own welfare. The urine is examined before the patient begins the second day ration; if sugar is found, the carbohydrate ration is reduced to 80 Gm.; if under this reduced ration sugar continues to appear, the third day's carbohydrate ration is made to conform to the patient's minimum carbohydrate need (1 Gm. to 1 Kg.); if sugar continues to appear on this minimum allowance, insulin is given in gradually increasing doses until the urine is sugar free. (The beginning dose of insulin was 2 units three times daily.) The urine being now sugar free, a blood sugar estimation is made to determine the renal threshold. By this time, patients are usually sufficiently familiar with food value calculations to be permitted to care for themselves at home; they are given record blanks, to be filled in at home, and are told to return in a week for a check up. In those very mild cases in which the urine did not show sugar on the first day's ration, the carbohydrate allowance was increased 10 Gm. daily until sugar did appear. In cases of severe diabetes this routine had to be modified, but in a large majority of cases it was found ample.

At each meal the patient himself is required to calculate the food value of each portion served (fig. 2). Beyond question this is the most valuable part of the procedure, for, until the diabetic patient learns to calculate accurately food values by himself, he cannot hope for any permanence in his improvement. At the beginning the patients are slightly confused, but persistence on the part of the dietitian soon qualifies even ignorant foreigners to feed themselves with surprising accuracy. Several of the patients were unable either to understand or to write English, but with the help of a school child or an English speaking neighbor, they soon became able to "live within their limits" and improved accordingly. Diabetic scales are an essential; they simplify the calculation and serve to impress the patient with the importance of accuracy in diet.

MEAL ORDER

Time (Mid-day, ~~Evening~~) Date 10-2-26

Name Mrs. Samuels.

Address Table 5.

Grams		Quantity C	P	F
100	Bouillon			
100	Broiled Chicken			
100	String beans			
100	Brussel Sprouts			
100	Salad			
30	French dressing			
30	Bread			
1	Degesta			
40	Cream, 20%			
200	Coffee			
		C	P	F
	TOTALS			
		4	4	9
	Calories			
	TOTAL			

Fig. 2.—Blank on which patients are required to calculate the food value of each portion served.

The necessary information having been secured, a copy of a carefully kept record, together with comments and recommendation (fig. 3), is sent the physician who referred the case, and the patient thereafter remains under his control.

DIGEST OF RESULTS IN FIRST HUNDRED CASES

Of ninety-seven patients who completed the course, sixty-two were women and thirty-five were men. One was a 13 year old girl. Eighty-nine of these patients continued at their usual work.

Twelve required insulin, and all were taught to administer it to themselves. Six discontinued the use of unnecessary insulin.

There were five cases of renal glycosuria. Seventy patients had ++ or more of acetone on admission. Five had severe cases of diabetes and should have been

FILE UNDER PATIENT'S NAME
This copy must be kept on file. Fill in this copy using ink.

Patient Mary Black, Date 3-5-27
Address 720 - 8th St, .
File No
Physician Dr. John Doe,
15 Jefferson Ave.,
Brooklyn, N. Y.

DATE							
10-14	Weight 59 Kg. Height 167 cm. Age 47 Sex F						
	Normal 68 Kg. (for Height, Age, Sex) Surface Area 1.65						
	Basal Calorific Requirement 1400						
10-14	PRIOR URINE				Sugar 4.2	Acetone	XX
10-14	Test Diet No. 1 (C. 100) calories 1500				Resulting Sugar 3.0	Acetone	XX
10-15	Test Diet No. 2 (C. 80) calories 1460				Resulting Sugar 2.1	Acetone	XX
10-16	Test Diet No. 3 (C. 80) calories 1460				Resulting Sugar 1.8	Acetone	XXX
10-17	Maintenance Diet No. 1	ins.	c. 70	p. 50	f. 150	calories 1830	1.0 XX
10-18	Maintenance Diet No. " 2		c. 70	p. 50	f. 150	calories 1830	0.3 X
10-19	Maintenance Diet No. " 3		c. 70	p. 50	f. 150	calories 1830	0.0 0
Home 4 Days.	Maintenance Diet No.		C.	P.	F.	calories	
10-19	BLOOD SUGAR THRESHOLD 260 Mgm. per 100 c.c.						
	TOLERANCE (carbohydrate) c. 55		p.	f.	calories		
	MINIMUM NEEDS c. 70		p.	f.	calories		
	SUGGESTED DIET c. 85		p. 50	f. 150	calories 1890		
	PROBABLE BEGINNING INSULIN NEEDS 5 Units 3 times daily.						

Note 1- Mrs. Black's Carbohydrate burning capacity is much below her needs. She is under weight, so we are suggesting a temporary diet (2 weeks).
2- Would suggest a blood sugar estimation every 10 days. When blood sugar is near normal Carbohydrates may be gradually increased if tolerated.
3- She is sufficiently familiar with the calculation of her own diet to permit her caring for herself at home.

Fig. 3.—Specimen of report sent to physician.

in a hospital, but they refused to go, "having been there previously."

Nine days was the average time spent at the dining room, and the average cost to the patient was $22.

Contrary to expectation there was very little disposition to violate rules; instead, 90 per cent became enthusiastic in their cooperation and many of them today are remarkably proficient even in the larger aspects of the science of dietetics. The "laboratory work," as one patient termed the dining room drill in calculations, was a source of genuine interest and qualified all the patients to feed themselves at home with accuracy. All patients are told that they will be required to feed themselves at home, keeping full records (fig. 4) for a week before being discharged, and most of them proved capable of doing so when the test-period reports came back. Special stress is laid on the avoidance of gluten foods, and all are encouraged to take the same food prepared for other members of the household.

Without exception, all who completed the course have been markedly benefited; the blood sugar in all the mild cases has fallen to near normal; the obese have lost weight, and the underweight have gained. The plan is not complicated and may be employed in any hospital providing a dietitian trained in diabetic dietetics.

REPORT OF CASE

The following report is a concrete illustration of the use of this method in one case.

C. A. S., a man, aged 42, weighing 61 Kg. (normal, 70 Kg.) after a stay of three weeks in the hospital, went home with the urine sugar free and with a blood sugar of 13.5 per cent. Four weeks later he came to the dining room with a urine sugar of 3.5 per cent; he had been dieting by himself, using household measurements. He had no knowledge of his carbohydrate tolerance, nor was he able to test his urine at home. After four days of routine he was capable of accurately calculating his diet; on the seventh day he was sent home with a tolerance of carbohydrate, 70; protein, 70, and fat, 120. A week later he returned with a sugar-free urine and a blood sugar of 14.8 per cent. His "home records" were models of accuracy. Ten months later his carbohydrate tolerance had increased to 140 and the urine was still sugar free. By this time the patient had acquired such proficiency in feeding himself "by the estimation method," through a persistent use of the scales, that he took a two weeks sea voyage, leaving his scales at home (but not the Benedict's solution) and returned with a sugar free urine and a blood sugar of 15.5 per cent.

SUMMARY

1. The plan is designed to obtain essential data and to instruct the diabetic patient in the calculation of food values without hospitalization, thus permitting him to follow his usual occupation.

M_____

Gms.	Morning	C Gms.	P Gms.	F Gms.
	Noon			
	Evening			

DAY'S TOTALS

	C.	P.	F.
Morning			
Noon			
Evening			
Gms.			
CALORIES	4	4	9

Sugar Test_____
Insulin_____
Notes
TOTAL_____

Fig. 4.—Home record form.

2. The data so obtained reveal the patient's carbohydrate burning capacity more accurately than if obtained by hospitalization.

3. The calculations by the patients of the food values of each portion of food served is an efficient objective means of qualifying them to employ the method at home.

4. The plan is workable in hospitals in which the personnel includes a competent dietitian.

61 Greene Avenue.

LINSEED OIL DERMATITIS

F. J. VOKOUN, M.D.
CLEVELAND

I began the study of linseed oil dermatitis when I was appointed industrial physician for the Sherwin Williams Company, paint manufacturers of Cleveland. In the manufacture of paint, linseed oil is an important factor. One of the plants of this company is devoted to the production of linseed oil, and it is in this plant that the cases were found.

For many years it was noticed that dermatitis was rife among the workers in the mill. The cases were usually mild—some of these persons had areas on the hands or feet which caused symptoms of itching or burning but were not severe enough to incapacitate them. However, soon after taking over the work from this plant I was confronted with three severe cases of dermatitis which necessitated keeping the men home from work. These cases were serious and brought the matter forcibly to my attention.

My recent preliminary paper[1] on this subject included a presentation of three cases, with a report of the symptoms and therapeutic procedure. Since then I have made careful investigations and gathered data which ought to be of more extended interest.

Questionnaires were sent to the larger linseed oil mills of the country, and the case reports on file with the Sherwin Williams Company have been studied for the last three years. As a result of this investigation, the following data have been collected.

W. J. Aldrich, welfare director of the Spencer Kellogg Company, which has linseed oil mills in five different cities, reports as follows:

I have in my last twelve years' experience in connection with the linseed oil industry given this matter considerable study and have consulted various physicians on the subject, but they have never been able to give very satisfactory information. As the experience of a layman may be of interest to you nevertheless, I will answer the questions to the best of my ability in the order in which you ask them.

1. As to the number of cases reported in the last five years, I could not give you this definitely, as we have not kept a record of them. Taking all of our mills together, we think they have run into the hundreds.

2. As to the place from which the seed came that causes the oil dermatitis, our data on this point are not altogether accurate, but we think the seed from South America is more irritating than the seed from Canada or the Northwestern states. A number of years ago considerable seed was imported from India, and our experience was that this seed was more irritating than others.

3. As to the nature of the eruption, it is usually on the forearm and hands. Occasionally it has appeared on the body, about the neck, shoulders, breast and upper back, but the latter is not very frequent and only in cases in which the man has an exceptionally tender or sensitive skin.

4. As to the treatment, we have found that whenever a man has laid off for three or four days, the irritation immediately disappeared. We have also found that in most instances the irritation has been caused by the man using burlap to wipe the oil and meal from his hands and forearms between pressings, which in itself is exceedingly rough and irritating and contaminated more or less with infectious substances. We have found that the use of sterilized rags or towels in place of the burlap has caused this irritation to disappear to a large extent. In addition, a thorough cleansing with soap after the work period has been decidedly effective.

We have found that it is not always an easy matter to induce the men to be particular as to the matter of this cleansing, but wherever they have followed our instructions the irritation has practically disappeared.

In the more aggravated cases we have used with good results a sulphur salve combined with 16 per cent balsam of Peru. This treatment, combined with the above mentioned sanitary precautions, has cured nearly every case without the necessity of the man taking time out from his work. However, an occasional case occurs in which a man has a tender and sensitive skin and a week's layoff has been found necessary; but this is exceptional.

5. Your question as to which seed gives the greatest trouble has been partially answered in the fourth paragraph. I will repeat that the Indian seed gave us the greatest trouble. The seed we now use is from South America and Canada, and we think that from South America is more irritating than the Canadian seed. We are not inclined to think that this is an essential factor.

Dr. Barnett Kooperman, who has taken care of the men in the Spencer Kellogg mill at West New York, N. J., for the last eight years, reports:

I believe that "linseed oil dermatitis" is a wrong term, as the linseed oil does not cause dermatitis. The inflammation is caused by the dust from the flaxseed—both ground and the seed. I have treated approximately 400 cases of linseed dust poisoning within the last five years. It seems that blond people, German, Norwegian, Swedish and all northern European people, are more subject to the dermatitis than are the Italian, Spanish and other dark complexioned people. Colored people are attacked the same as the northern Europeans.

As 95 per cent of our seed comes from Argentina, I am in no position to say which seed causes less skin irritation.

The nature of the eruption is a weeping eczema. It has been my experience to use a number of remedies, but I find the following the most efficient: menthol, 2 grains (0.13 Gm.); phenol (carbolic acid), 1 grain (0.065 Gm.); sufficient 2 per cent ammoniated mercury to make 1 ounce (30 Gm.). Or balsam of Peru, 1 drachm (4 Gm.), and sufficient 1 per cent ammoniated mercury to make 1 ounce (30 Gm.).

The Mann Brothers of Buffalo reported that they have no record of any linseed oil dermatitis with the possible exception of one doubtful case. Their physician made no report, so we cannot place much value in this reply.

A careful study of the records of the Sherwin Williams Company for the last three years does not reveal any report of men treated primarily for dermatitis, with the exception of the cases I have already cited. However, in a discussion with Mr. Kramer, who was superintendent at the mill for three years, I evolved that:

1. Minor attacks of dermatitis were very common among the workers and many of them used sulphur ointment to relieve them.

2. Flaxseed from South America was much more irritating than that from the United States or Canada.

3. The condition was rarely so severe that the men had to stop work, although occasionally they would take a "vacation" until their skins became sound.

4. During the three years of his superintendency, he saw hundreds of cases of dermatitis.

From my experience with this condition I have made several observations. The lesions are usually on the anterior aspects of the arms, the dorsa of the hands, and the anterior aspects of the thighs (in those men whose thighs touch the oil in their work). The lesions are symmetrical, discrete, deep, and thickly scattered, and consist of primary macules and papules with secondary scratch marks and crust formation. The symptoms are intolerable itching and burning, especially after bathing or retiring for the night.

In the differential diagnosis, scabies must be ruled out. This was carefully done in all cases. The

1. Vokoun, F. J.: Linseed Oil Dermatitis, Ohio State M. J. 23: 229 (March) 1927.

Wassermann test should also be employed to rule out a possible atypical secondary rash. If the diagnosis is difficult, a simple test will prove it: Have the men stay away from work for a few days, and they will improve if their dermatitis is due to the oil.

In my experience sulphur ointment, calamine lotion, 5 per cent white ammoniated mercury and Lassar's paste have failed to give relief in severe cases. The only thing to do for these sufferers is to grant them a "vacation" until their epidermis becomes intact.

CONCLUSIONS

1. Dermatitis is very common among the workers in linseed oil mills.

2. The areas affected are those which come in contact with the oil, this being an example of dermatitis venenata.

3. The cases occur more frequently when Indian or South American seed is being pressed than when Canadian or American seed is used, so that it may be assumed that the irritating substance is in larger proportion in the former seeds.

4. The exact nature of the irritating substance is at present undetermined.

2767 West Twenty-Fifth Street.

ACUTE CARDIAC DILATATION

AN EVER PRESENT DANGER IN INTRAVENOUS INJECTIONS *

J. H. CLARK, M.D.
PHILADELPHIA

A comparatively few years ago, the injection of drugs into the circulation was considered a somewhat dangerous practice and as a daily procedure was viewed as radical therapy. Today, however, it has become a well recognized therapeutic method of administering drugs, and almost everything in the Pharmacopeia is prepared in ampule form for intravenous use. The procedure is not, however, unattended with danger. Even simple intravenous injections of supposedly innocuous physiologic sodium chloride solution or dextrose in saline solution may prove disastrous, if the cardiac condition of the patient is considered of secondary importance to the accepted intravenous therapy or his general condition. The practice has become so prevalent that intravenous injections of saline or dextrose solution are employed, almost as a routine measure, even in the presence of a failing myocardium, when the patient's general condition appears to be failing or he is in need of fluid which cannot be taken by mouth. The bad and possibly fatal effect of the extra load thrown rapidly on the heart is lost sight of in the attempt to give the patient the required fluid or antiketogenic substance.

Recently, at the Samaritan Hospital, we have had two deaths occurring in patients shortly after intravenous injections of 10 per cent dextrose solution, and one after physiologic sodium chloride solution (charts 1, 2 and 3). Of the two patients receiving dextrose solution, each experienced chills about twenty minutes after the injection. Their pulses became irregular and feeble, and they died within four and nine hours after the injection. One had received previous injections of dextrose solution without exhibiting such phenomena.

* From the laboratory of the Samaritan Hospital.

REPORT OF CASES

CASE 1.—A woman, aged 39, had auricular fibrillation before the performance of a cholecystostomy for gallstones, Nov. 29, 1926. Her immediate postoperative condition was good. The wound drained well, and there was slight arrhythmia after operation. December 1, the patient received 500 cc. of a 10 per cent dextrose solution intravenously without reaction. This was repeated, December 2, and again, December 3, without reaction. The patient's general condition improved. December 4, at 2 p. m., immediately following an intravenous injection of 10 per cent dextrose solution, the patient had a chill of twenty minutes' duration, and complained of severe pain in the region of the heart and of a sense of oppression. She became progressively more cyanotic and expectorated continuously small quantities of whitish fluid (edema of lungs?). The pulse was irregular and scarcely perceptible. Death occurred at 11 p. m.

CASE 2.—A man, aged 35, had a vesiculostomy and prostatectomy performed, Dec. 9, 1926, for purulent vesiculitis and perirectal phlegmon. He developed hiccup and vomiting. The

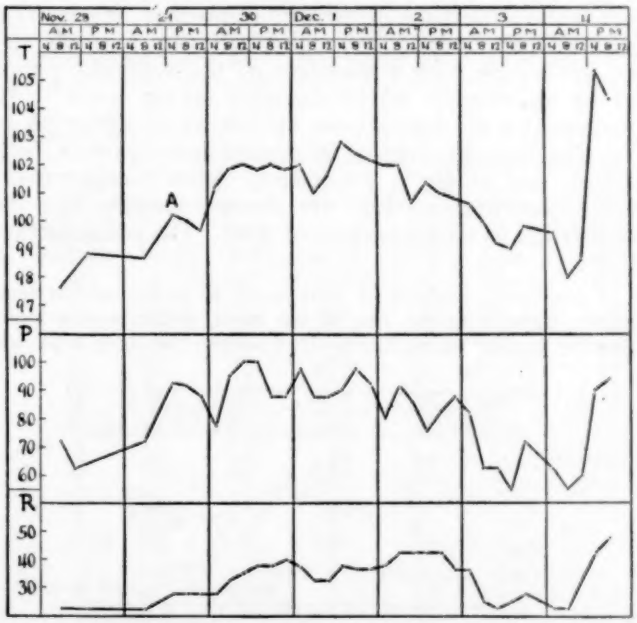


Chart 1.—Temperature, pulse and respiration in case 1: *A*, after operation.

blood pressure fell from 120 systolic and 65 diastolic to 60 systolic and 30 diastolic, December 13. On this date at 10:50 p. m. the patient was given 475 cc. of a 10 per cent dextrose solution intravenously. Chill developed at 11:10 p. m., the patient became cyanotic and despite stimulation died at 2:40 a. m., December 14.

CASE 3.—A girl, aged 9 years, at midnight, Feb. 7, 1927, had an appendectomy performed for a gangrenous appendix. Her immediate postoperative condition was good. February 8, she received 250 cc. of Fisher's solution by bowel. Februry 9, vomiting developed. The patient was given 500 cc. of a 2 per cent dextrose solution by hypodermoclysis at 12:45 p. m. At 4:45 she received 425 cc. of physiologic sodium chloride solution intravenously through a small hypodermic needle. At 5 o'clock the patient became cyanotic; breathing was labored; the pulse was rapid and thready, and a chill developed, lasting one-half hour. Venesection was attempted at 6:05 but without result, as the veins were collapsed. The patient died at 6:22 p. m. from acute cardiac dilatation.

COMMENT

At our clinical pathologic conference, it was suggested by some that these deaths might be due to some impurities in the dextrose solution, to alterations in the molecular constitution produced by sterilization, or

to the formation of by-products on standing. However, all the dextrose solution used for intravenous work at the Samaritan Hospital is prepared daily in 500 cc. flasks* from dextrose U. S. P., and what is not used on the day of its preparation is discarded. Checking over the histories of patients in the hospital who received intravenous injections of dextrose on the same date, we could not find any similar reactions. This seemed to rule out the possibility of dextrose being responsible. However, that a personal idiosyncrasy to dextrose in case 2 might exist must be kept in mind. Hanzlik and Karsner,[1] in an experimental study of anaphylactoid phenomena, concluded that intravenous injections of sucrose in hypertonic concentrations of 50 and 85 per cent are moderately though definitely injurious to the lungs, although symptomatically they appear to be indifferent. They did not, however, include dextrose in their study, and the results are not, therefore, directly applicable to dextrose, although suggestive.

On the other hand, Hewlett [2] states that "a dilatation of the ventricle may be caused either by a weakening of the muscle with a lessening of the ventricular tone or by an increase in the demands on the heart." In patients whose hearts have already been subjected to nervous or toxic trauma, by operation or toxemia, both factors are at work, particularly when comparatively large quantities of fluid are thrown directly into the circulation in a short period of time. He states further that:

> A temporary increase of work leads to a further but temporary increase in the size of the heart, which within limits aids the cardiac contractions. If, however, the acute dilatation exceeds a certain limit it may exert a very unfavorable effect upon the cardiac function. Excessive dilatation lessens the contractile force of the muscle and the changes that characterize acute cardiac failure then supervene. The dilated ventricle fails to expel the blood coming to it, the venous pressure rises, and this in turn tends to distend the ventricular cavity still further during diastole. . . . If, however, the demands are not reduced below the functional capacity of the weakened muscle, the continued collection of blood in the dilated ventricle leads to a cardiac death.

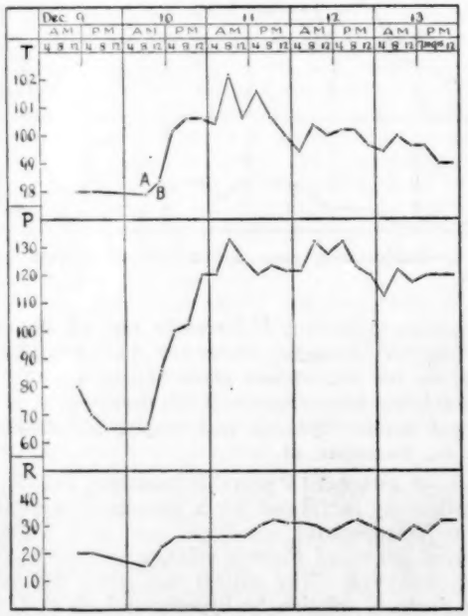


Chart 2.—Temperature, pulse and respiration in case 2: *A*, before operation; *B*, after operation.

This, it seems to me, is what happens when intravenous infusions of physiologic sodium chloride solution or 10 per cent dextrose solution are administered to patients already showing cardiac impairment, as evidenced by a weak rapid pulse.

Another death occurring on the outside, as detailed to me by the assistant of the attending physician, illustrates quite clearly the cardiac death described by Hewlett. The patient, a victim of abortion, showed definite toxic signs and symptoms, and an intravenous injection of 500 cc. of 10 per cent dextrose solution was ordered. This was administered slowly by gravity, through a small caliber needle. After about 250 cc. had entered the circulation, the pulse improved in both regularity and volume, although no blood pressure determinations were made; the patient stated that she felt improved and she appeared brighter and stronger.

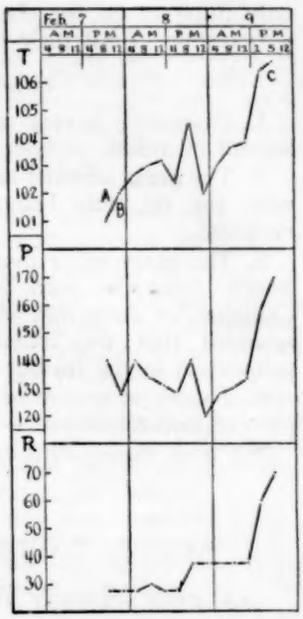


Chart 3.—Temperature, pulse and respiration in case 3: *A*, before operation; *B*, after operation; *C*, by rectum.

The intravenous injection was continued until the total amount of 500 cc. had been given. The temporary improvement, however, noted after 250 cc. had been administered, was replaced by the former weak, thready condition of the pulse, and the patient died shortly after the infusion. Acute cardiac death is also illustrated by case 3. The solution was given through a hypodermic needle, and, while probably not given too rapidly, nevertheless caused serious embarrassment to the heart, for the patient became dyspneic and cyanotic after 425 cc. of physiologic sodium chloride solution had been given intravenously and died about one and a half hours later. Venesection was attempted to relieve the cardiac dilatation, but without results. Again in case 1, although bedside notes were not made by the physician or intern regarding the condition of the lungs by auscultation, or of the blood pressure, the continuous expectoration of small amounts of a whitish fluid, after the injection, is extremely suggestive of a pulmonary edema and failing right heart, aided, at least, by the additional fluid given intravenously.

CONCLUSION

Intravenous therapy is not the innocuous procedure it is generally considered, and these four cases illustrate the necessity of carefully choosing patients for the intravenous administration of drugs, particularly when large amounts of fluid are to be given. If the injection is given slowly and a careful watch is kept of the pulse and cardiac condition, by frequent blood pressure determinations made during the injection, such fatalities should be preventable.

3343 North Twentieth Street.

1. Hanzlik, P. J., and Karsner, H. T.: J. Pharmacol. & Exper. Therap. **23**: 173 (April) 1924.
2. Hewlett: Pathological Physiology of Internal Diseases, New York, D. Appleton & Company, 1924, pp. 15, 19.

REPEATED ACIDOSIS AND COMA IN JUVENILE DIABETES*

THOMAS A. CLAWSON, JR., M.D.
AND
GEORGE A. HARROP, JR., M.D.
BALTIMORE

The eventual prognosis in patients with juvenile diabetes has aroused great interest recently, since it has become quite evident that modern methods of treatment are of especial value in this type of the disease. It has been frequently emphasized that diabetes in childhood and in youth is usually uncomplicated by any of the numerous extra factors that may be present in later life. Diabetic children in the absence of severe infection usually respond very readily to dietary measures and to insulin, and severe acidosis or coma, in general, is quite as amenable to treatment as it is in older patients in whom diabetes is generally considered to be less severe. Recent articles by prominent American students of the disease (Joslin, Geyelin) indicate that the experience gained in the study of large series of cases since the introduction of insulin gives just cause for a considerable measure of optimism. In sharp contrast to this point of view are the conclusions reached by recent German observers,[1] who are decidedly pessimistic. Doubtless it is entirely too soon to expect definite conclusions as regards this difficult problem. It should be borne in mind that reliable and standardized insulin preparations were available for use on the continent much later than in this country.

That proper medical direction and the constant and intelligent obedience to instructions are in any event indispensable for the successful management of patients with juvenile diabetes we believe is well shown in the accompanying case report, which records twelve successive periods of severe acidosis or coma in a colored child, following dietary indiscretions, and, in one instance, of infection. Death finally resulted outside the hospital, evidently in coma, because the family did not apply for medical aid.

REPORT OF CASE

B. W., a colored girl, aged 11 years at the time of the first admission, Jan. 29, 1924, to the Johns Hopkins Hospital in diabetic coma, had become suddenly ill about six weeks before, with polyphagia, polyuria and polydipsia. It was noted that she tired very easily and that there was gradual loss of weight. Her past history was not significant: pertussis at 3 years, measles at 5 years and two attacks of tonsillitis at 7 and at 8. There had not been any other infections. The family history did not include any cases of tuberculosis obesity, diabetes or obvious endocrine disorder. During the following thirty-four months, until death occurred outside the hospital, Nov. 26, 1926, she was admitted twelve times in severe acidosis or coma, and in all spent 549 days out of the intervening 1,131 days in the ward. Death finally occurred owing to the fact that she was not brought to the hospital for treatment following a dietary excess on Thanksgiving Day, 1926. All the attacks were severe, but the patient responded with relative ease to treatment in each of them. The dietary lapses were in all instances primarily due to neglect. Either the child was allowed to shift for herself at home or she stole food or candy because supervision at home was completely lacking. Strenuous efforts were continuously made by the social service department of the hospital to secure some measure of cooperation, or permission to place the child in a home where proper care would be assured. Unfortunately, it was impossible to do anything that would be permanently satisfactory. The accompanying table gives the salient facts recorded during the course of the disease.

Course of the Disease

Admission	Date of Admission	Condition	CO_2 Capacity (Van Slyke) per Cent by Volume	Probable Cause from the History	Date of Discharge	Diet on Discharge				Insulin Dosage on Discharge, Units	Growth Under Observation	
						Carbohydrate	Protein	Fat	Calories		Height, Cm.	Weight, Kg.
1	1/28/24	Coma	12	Previously untreated	3/25/24	68	48	162	1,925	0	139.5	27.3
2	6/20/24	Severe acidosis	14	No insulin; dietary excess	8/14/24	44	54	119	1,460	0	.....	....
3	9/20/24	Acidosis	23	Dietary excess	11/23/24	58	42	139	1,650	20	140.0	30.8
4	1/12/25	Acidosis	14	Dietary excess	3/ 2/25	63	40	148	1,750	30	140.0	34.4
5	4/30/25	Acidosis	20	Dietary excess	5/18/25	62	32	142	1,650	54	.....	....
6	6/11/25	Severe acidosis	17	Dietary excess	7/ 7/25	53	42	136	1,600	40	.....	....
7	7/27/25	Coma	9	Dietary excess	8/27/25	60	60	160	1,950	35	.....	....
8	9/23/25	Acidosis	38	No insulin; dietary excess	10/27/25	63	60	161	1,975	45	141.5	32.8
9	11/27/25	Coma	..	Dietary excess	1/13/26	60	50	160	1,900	30	142.0	35.2
10	2/ 4/26	Acidosis	..	Infection; tonsillitis	2/15/26	60	50	160	1,900	35	.....	....
11	4/11/26	Coma	16	No insulin; dietary excess	7/29/26	50	50	128	1,550	55	.....	....
12	10/26/26	Coma	..	Dietary excess	11/11/26	50	50	135	1,600	60	144.5	38.5

Died unattended outside the hospital in coma, due to dietary excess and lack of insulin, Nov. 26, 1926.

COMMENT

Aside from the unusual history of this patient, we believe that the case presents certain points for reflection. An inspection of the summarized table makes it evident that the diabetic condition gradually became more severe with each period of hospital observation. The carbohydrate tolerance in proportion to the insulin requirement grew progressively worse. We do not believe, however, that this is a fair indication of what might have been the course under proper treatment. The social conditions in which the child lived could scarcely have been worse, and the parents were almost completely devoid of intelligence or insight into the situation. We think that the fact that so many shocks and insults were withstood in so short a period, and that relief from severe acidosis or coma was repeatedly obtained so easily, indicates that under a more favorable environment a happier outcome might have been anticipated.

In the face of unreasonable resistance and lack of cooperation on the part of those responsible for the care of a diabetic child, it is very unfortunate that steps cannot be taken to commit the patient during the period of minority to an institution where proper care and dietary treatment might be given. We estimate that the cost to the Johns Hopkins Hospital of the

* From the Medical Clinic, Johns Hopkins Hospital and University.

1. Priesel, R., and Wagner, R.: Die Pathologie und Therapie der kindlichen Zuckerkrankheit, Ergebn. d. inn. Med. u. Kinderh. **30**: 536, 1926.

periodic and perfectly futile rehabilitation of this patient, in large measure unnecessary under other circumstances, and exclusive of medical attendance, was about $2,500. Juvenile diabetes is not a very uncommon disease. This case is an unusually striking instance of several such cases which we have seen in this clinic in the indigent poor, and no doubt the same situation holds good in every large diabetic clinic. The continuous free supply of insulin to these patients, who often require large daily doses, is a serious financial burden. It is unfair to expect the medical outpatient departments of hospitals to assume this obligation indefinitely. It could properly be undertaken by public health authorities in the same way that biologic serums and antitoxins are rendered available, and the necessary and essential continuous medical supervision might properly be assumed by the same agency. That it will assuredly be necessary to work out some such public system of relief would seem certain.

THE NASAL APPLICATION OF SOLUTION OF PITUITARY FOR OBSTETRIC PURPOSES

PRELIMINARY COMMUNICATION

J. ISFRED HOFBAUER, M.D.
BALTIMORE

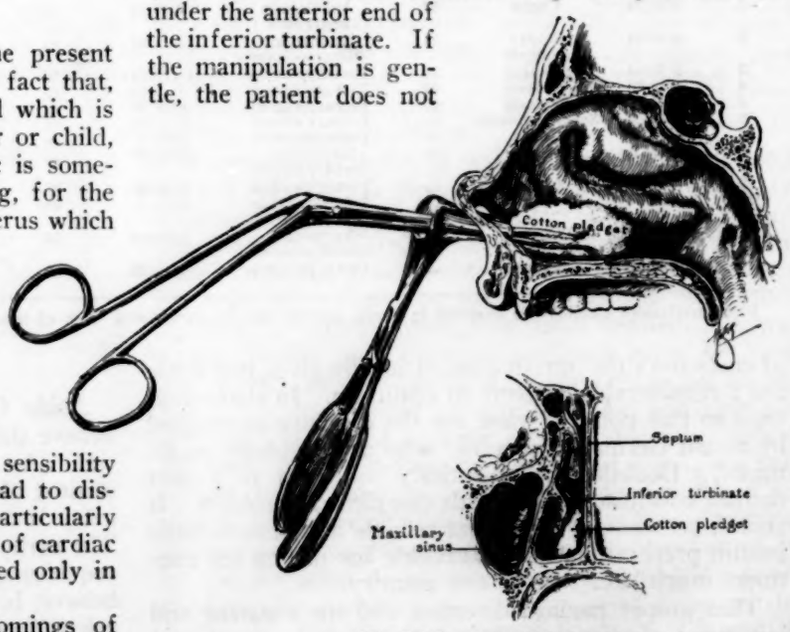
The recent clinical study of Scott on the present state of the induction of labor revealed the fact that, up to this time, no method has been devised which is altogether free from danger to either mother or child, and more particularly that Watson's technic is sometimes followed by death of the infant, owing, for the most part, to the tetanic contraction of the uterus which sometimes follows the use of solution of pituitary. Watson's method is based on the sensitization of the uterine muscle by the administration of castor oil and quinine, followed by the subcutaneous injection of 0.5 cc. of solution of pituitary at half hour intervals, until labor sets in or until six doses have been given. Those who have had experience with the method agree that undue sensibility to the action of solution of pituitary may lead to disastrous effects on the child; and as this is particularly likely to occur in the presence of toxemia or of cardiac complications, the method should be employed only in selected cases.

The general recognition of these shortcomings of Watson's method gave me the impetus to seek some method of improving it. Two main considerations guided my search for new channels through which solution of pituitary may be administered in a more effective and at the same time in a less dangerous way; the desiderata being to discover, if possible, whether its local application to some mucous membrane would permit its slow and steady absorption, and, if this were the case, to permit the possibility of withdrawing the drug as soon as the tendency of the uterus to pass into tetanic contraction became noticeable.

The oral administration of solution of pituitary was first considered, since the recent experimental work of Knaus showed that after the administration of the drug to the sublingual region a marked increase in the tone and automatic movements of the uterus occurred. We employed this technic in twenty patients, and labor was successfully induced in nine of them, an efficacy of 45 per cent. In eleven additional instances the sublingual application was employed to stimulate pains in women already in labor, but in whom the pains had stopped for a number of hours, irrespective of the degree of cervical dilatation and regardless of whether the membranes were ruptured or not, and satisfactory results were obtained in ten patients without ill effect to either mother or child.

In the search for another portal of entry from which the solution of pituitary could be absorbed more satisfactorily, my attention was directed particularly to the nasal mucosa, in view of the fact that the mucous membrane covering the inferior turbinate is a highly vascular tissue, whose blood and lymphatic supply is markedly increased during pregnancy. Since in the present communication I propose to deal chiefly with the therapeutic utilization of the nasal mucosa for the absorption of solution of pituitary, both through the blood stream and by way of the lymphatics, the accompanying semidiagrammatic representation of the lateral nasal wall will be of service in understanding the topography.

Under direct vision, with aid of a nasal speculum and reflected light, a small pledget of cotton of such size as to fit easily but snugly between the septum and the inferior turbinate, and moistened with from 10 to 20 minims (0.60 to 1.25 cc.) of solution of pituitary is inserted under the anterior end of the inferior turbinate. If the manipulation is gentle, the patient does not experience any appreciable discomfort, and in none of our cases was it necessary to resort to any kind of local anesthesia.



Nasal induction of labor.

Prior to the nasal application of solution of pituitary, the patient is prepared in the routine manner by being given a hot drink and castor oil and quinine by mouth, followed by a high enema. From two to three hours were then allowed to elapse before the administration of the first dose of solution of pituitary, in order to make sure that the preliminary treatment had not been sufficient to induce pains. Uterine contractions invariably follow within from three to five minutes after the nasal application. In the event that the first contraction lasts longer than four minutes, the pledget is with-

drawn when the uterus relaxes within the next sixty or seventy seconds. If, however, tetanic contraction does not occur during the first fifteen minutes, it is considered that all danger from such an accident has passed.

Unless the first application has resulted in setting up satisfactory contractions, the pledget is withdrawn at the end of two hours, and a fresh one applied to the opposite nostril for a similar period of time. In the majority of my cases, from one to three applications were required for a successful induction of labor, but in a very few cases as many as five doses were necessary. It is important to bear in mind that experience shows that in preeclamptic cases labor can be induced with the greatest ease, one application of solution of pituitary usually being sufficient; whereas greater difficulty is encountered in the nephritic cases, in which the response is definitely less pronounced. It is interesting to note that in none of the toxemic cases did the blood pressure rise materially over the initial level during the course of induction. Furthermore, I gradually came to realize that while in normal pregnancy the nasal method is rarely effective much before term, it gives satisfactory results in toxic patients a month or six weeks earlier.

Up to the present, we have employed the nasal method of inducing labor in seventy patients; the indications are given in the accompanying table.

Indications for Nasal Application of Pituitary Extract

1. Toxemia	28 cases
2. Postmaturity	12 cases
3. Severe pyelitis	5 cases
4. Hydramnios	2 cases
5. Dead fetus	2 cases
6. To test the method in normal pregnant women during the last month of pregnancy and at term	21 cases

In groups 1 to 5 (forty-nine cases), labor was induced successfully in every instance. On the other hand, nine failures occurred in the sixth group. Here it was found that when the cervical canal measures 2 cm. or more in length, and the external os is tightly closed, the chances of success are comparatively poor; while the prospects are much better when the cervical canal is obliterated. This observation is quite in harmony with the results of Knaus' recent experiments, which indicate that considerable changes occur in the relationship between the hypophysis and the uterine muscle during pregnancy, and that as a result of an increase in the sensitiveness and the tone of the uterine muscle toward the end of pregnancy, labor can be induced in animals by comparatively small doses of solution of pituitary at term, although such doses are entirely ineffective before term.

The fact that in this series all the babies were born alive testifies to the control one possesses over the action of the drug. Furthermore, it may be mentioned that the nasal method has also been found a safe and efficient procedure for accelerating labor already in progress.

A more extended paper on the subject by me and my co-workers, Drs. Hoerner and Oliver, will shortly appear in the *American Journal of Obstetrics and Gynecology*.

Johns Hopkins Hospital, Washington and Monument streets.

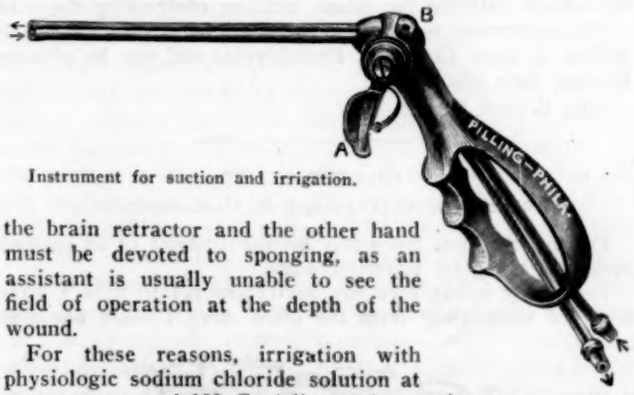
Clinical Notes, Suggestions and New Instruments

A NEW INSTRUMENT COMBINING SUCTION AND IRRIGATION FOR INTRACRANIAL SURGERY

TEMPLE FAY, M.D., PHILADELPHIA
Neurosurgeon, Episcopal Hospital; Associate in Neurology, University of Pennsylvania School of Medicine

The need for clear vision in the depth of a small field is well recognized by every neurosurgeon. Operations on the brain and spinal cord must be performed within a very limited area, such as the transfrontal approach to the pituitary body, the section of the posterior root of the trigeminus, and certain suboccipital operations involving the cerebellopontile angle.

The lighted retractor has proved invaluable in exploring these deep recesses below the brain. The great problem at present concerns the matter of sponging within the depths of the wound, so as to give a clear view of the structures and landmarks presenting during the operation. The extreme friability of the cortical vessels has made it necessary to use the softest cotton pledgets, small enough to be introduced into the limited space concerned. A small amount of hemorrhage in the depth of the wound arrests the progress of the operation until the bleeding point has been controlled. The use of many of these cotton sponges is necessary to remove even a small amount of blood. There is frequently the danger of leaving a small cotton pledget behind. The operator is often at a distinct disadvantage, because one hand is occupied by the brain retractor and the other hand must be devoted to sponging, as an assistant is usually unable to see the field of operation at the depth of the wound.



Instrument for suction and irrigation.

For these reasons, irrigation with physiologic sodium chloride solution at a temperature of 100 C., followed by suction as a means of clearing the field, has become of extreme value. Heretofore this method has been one of alternate irrigation and suction, and the operator has found it difficult to employ the proper procedure with sufficient rapidity to locate a small bleeding point. The instrument here illustrated has overcome this difficulty in that it combines both suction and irrigation, permitting the operator to direct accurately the flow of warm saline solution to the proper point, and withdraw the accumulating fluid as rapidly as necessary. The instrument is so designed that it may be used for irrigation alone or suction alone, if so desired, or, if suction and irrigation are required at the same time, this may also be accomplished.

The instrument is so balanced as to fit the hand with a pistol grip, the balance being entirely within the palm of the hand, so that the slightest movement of the point can be directed by the wrist. There is no danger of injuring structures because of an unwieldy instrument. The double barreled tip has been made of soft metal, so that it may be molded into any shape or direction that is desired, and the instrument can thus be used to reach inaccessible corners, or to follow the line of operative approach. The spring valve trigger (*A*) controls the irrigation of saline solution. It is so constructed that the valve remains closed until the trigger is pulled. The flow and amount of fluid delivered at the tip depends on the degree of opening of the valve. The height of the fluid container determines the pressure under which fluid is delivered. The "Tucker valve" (*B*), devised by Dr. Tucker in the Bronchoscopic Clinic of Dr. Chevalier Jackson, for suction and control within the depth of the lung, has been utilized in this instrument.

Placing the thumb over the hole in the suction valve (*B*) produces suction at the tip of the apparatus. When the thumb is removed, the air enters valve *B* and there is no suction at the tip. Thus, by a simple movement of the thumb, suction may be obtained. By the flexion of the index finger, irrigation to the desired amount is controlled. The instrument is so constructed as to give the possibility of combined suction and irrigation; and in dealing with hemorrhage from small vessels within the depths of the wound, the bleeding point may frequently be located by the reddish, smoky column arising from a given point, indicated within the body of the clear saline solution, illuminated by the lighted retractor. A muscle graft placed over the bleeding point will give the required hemostasis.

The added advantage of combined irrigation and suction is evident by the fact that the irrigation fluid is within a closed system coming by means of a sterile tubing from a closed water bath reservoir, suspended above the level of the operating table. The suction apparatus, which consists of a simple water pump connected to the ordinary water supply with an intervening container, withdraws the hemorrhage and discolored saline solution from the field. It eliminates the "sloppy" disadvantage of open irrigation and does much to produce a clean, dry field.

In laminectomy work this instrument has proved of decided value in preparing the field before the dura is opened. The muscle bed is repeatedly irrigated with warm physiologic sodium chloride solution. Frequently, many oozing points are thus controlled. The others may be located and carefully ligated. When the irrigation solution returns clear, the dura may be opened without danger of blood from the margins of the wound entering the spinal canal or obstructing the field.

The instrument has been constructed for me by George P. Pilling & Sons Company, Philadelphia, and can be obtained through their offices.

2025 Walnut Street.

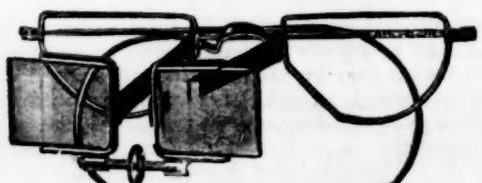
FOLDING LOUPE

WILLIAM W. GOLDNAMER, M.D., OAKLAND, CALIF.

Perhaps the most frequently used instrument of an ophthalmologist is a good binocular loupe.

Frequently it has been my misfortune not to have a loupe with me when away from the office, since I could not ordinarily carry one because of its bulk, as all loupes with which I was acquainted were very bulky. So I had alterations made on a Beebe loupe which would not add to its weight (this loupe was fitted with my correction). The loupe will fit in an ordinary number 5 spectacle case.

Loupe folded.



Loupe extended.

The obvious advantage of this will be instantly apparent to any ophthalmologist or to other physicians who need such an instrument.

The makers of this instrument, George H. Pilling and Son Company, Philadelphia, will be able to supply these folding loupes.

577 Fourteenth Street.

Special Article

THE QUARTERLY CUMULATIVE INDEX MEDICUS

WHAT IT STANDS FOR AND HOW TO USE IT*

FIELDING H. GARRISON, M.D.
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WASHINGTON, D. C.

During the year 1926, by arrangement between the American Medical Association and the Carnegie Institution of Washington, it was decided to fuse the *Index Medicus* (1879-1926) and the *Quarterly Cumulative Index* of the American Medical Association (1916-1926) to form the *Quarterly Cumulative Index Medicus,* financed jointly by the American Medical Association and the Carnegie Institution of Washington, compiled from material indexed and classified in the Libraries of the Surgeon General's Office (Washington) and the American Medical Association, and published by the American Medical Association. The new journal will be issued quarterly and cumulated semi-annually in two volumes. The first quarterly number (January-March) appeared in May, 1927. In acquainting our readers with the detailed merits of the new quarterly, it is fitting to give some account of its parentage.

PEDIGREE OF THE PARENT JOURNALS

The *Index Medicus* was started in January, 1879, by Drs. John S. Billings and Robert Fletcher as "a monthly classified record of the current medical literature of the world." This journal might be described as the grandchild of two ideas. Its parent, the Index Catalogue of the Surgeon General's Library, did not become known to the world as such until a year later (1880).

The germinal ideas were conceived in the brain of Billings when he was wrestling with his graduating dissertation on epilepsy at the Medical College of Ohio (Cincinnati, 1861), viz, "to establish for the use of American physicians a fairly completed medical library, and in connection with this to prepare a comprehensive catalogue and index which should spare medical teachers and writers the drudgery of consulting ten thousand or more different indexes or of turning over the leaves of as many volumes to find the dozen or so references of which they might be in search." In making a tabulation of seventy-four ascertainable cases of operations for epilepsy as the material for this dissertation, Billings found himself hard put to it for references and literature, which he obtained with the greatest difficulty, even by correspondence with the medical libraries of New York, Philadelphia and other American cities. He was driven to the conclusion that "while there was nowhere in the world a library which contained all medical literature, there was not in the United States any fairly good medical library" containing even a respectable fraction of this literature. In 1861, in fact, American research workers in medicine, if any, were driven to the several libraries in the European cities.

Billings found his opportunity on the last day of 1865 when, after arduous service as operative surgeon and medical inspector in Grant's campaign of 1864, he was assigned to the Surgeon General's office with nominal care (in addition to other duties) of the small collection of medical books which had existed in the War Department bureau since the days of Surgeon General Lovell (1818). How he gradually built up this collection (2,253 volumes in 1865) during the thirty

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years of his librarianship, first with the aid of a slush fund, then by annual appropriations from Congress, up to the 116,847 books and 191,598 pamphlets in the Library when he was retired from active service in the army (1895), is another story.

During the fifteen years preceding the appearance of the first volume of the Index Catalogue (1866-1880), Billings was experimenting on all known methods of cataloguing and indexing medical literature, from the ordinary type of author entry to the Dewey system (1876). Subject entries, fitful and eclectic as those in the catalogue of the British Museum, begin to appear in his catalogue of 1871 (13,330 volumes) and by 1876, he had evolved and published his Specimen Fasciculus of a medical library catalogue, indexing itself, as to both authors and subjects. Shortly after this event, Billings acquired an able and loyal assistant in the learned Dr. Robert Fletcher, who was assigned to duty in the Surgeon General's Library, Sept. 1, 1876. As plans for the publication of the Index Catalogue approached fruition, it became apparent to the two editors that while such a publication might give the bulk or cream of the world's medical literature on each indexed subject (say Brain or Cholera or Labor) up to the date of publication of the particular lettered volume (B, 1881; C, 1882; L, 1886), there was need for a current periodical index of the newer medical literature of each successive year. The *Index Medicus* was therefore issued in monthly numbers in 1879, while, largely through the good offices of Dr. Abraham Jacobi, appropriations for printing the first volume of the Index Catalogue were obtained in the same year.

The two germinal ideas specified were not essentially new: the merit lay, in Captain Cuttle's phrase, "in the application." The oldest known medical publications on Babylonian baked bricks or Egyptian papyri, not to mention the Hippocratic Canon, are really the shreds and remains of virtual medical libraries, works by different hands, associated with the name of an individual teacher, school or period, often overlaid with superadded material. The physicians of the Coan and Cnidian schools, as well as Aristotle, Theophrastus and the Alexandrian teachers, undoubtedly had medical libraries. The probable or presumable libraries of physicians in the successive centuries of the Middle Ages may be readily inferred by statistical computation of the number of citations from old authors in the various medical MSS. or incunabula. In her classification of the 15,000 medical MSS. of the Middle Ages extant in Great Britain, Dorothea Singer has, in fact, given us the probable subject classification of a medieval medical library. Many of the earliest printed books are carefully indexed from A to Z, nay, some of these incunabula, such as the Aggregator or Matthaeus Salvaticus, are really alphabetical index catalogues of the drugs and simples of the time. The concordances of Hippocrates by Erotian, Foes and Littré, or of Galen by Brassavola and Kühn, are alphabetical subject indexes to whole vast periods of Greek medicine. As far as mere books and pamphlets were concerned, Conrad Gesner, Merklin, Haller, Ploucquet, Young, Forbes, Atkinson, Watts, Hain, Choulant and Haeser had all made valuable contributions to medical bibliography. Haller published exhaustive bibliographies of botany, anatomy, surgery and internal medicine (1771-1778), Haeser of epidemic diseases (1843), Meissner a model index catalogue of books on pediatrics (1850). During 1830-1845, the Danish surgeon, C. P. Callisen, had even made a kind of index catalogue of the periodical medical literature of 1750-1845, but by authors only.

The new feature of the Index Catalogue and the *Index Medicus* was the exhaustive indexing of the books, pamphlets and contents of periodicals alphabetically by subjects, as well as by authors. The main classification in the first and second series of the *Index Medicus* (1879-1899) was a somewhat hierarchical arrangement of subjects in order of relative importance, from Bibliography and Anthropology to Nursing and Veterinary Medicine, under which rubrics the books and periodical titles indexed were alphabetized by authors. This necessitated the preparation and publication of somewhat cumbersome and expensive author and subject indexes to each annual volume. The classification employed in the latter was that of the Index Catalogue. Up to 1900, the attractive feature of the *Index Medicus* to university professors and research workers was its appearance in monthly numbers. To men like Welch or Osler or Jacobi or Mitchell these afforded, at stated intervals, a purview of their specialties or of the whole field of medicine, as pleasant and arresting as were the morning *Spectator* or *Tatler* to the eighteenth century Englishman. At the same time, the annual author and subject indexes insured the usefulness and value of the *Index Medicus* for the future. But it was obvious, from the start, that a journal of this type, financed by private enterprise, with a limited subscription list (never exceeding 500) was foredoomed to financial disaster. After contributing materially to the bankruptcy of two successive publishers, the *Index Medicus* was financed by its actual editor, Dr. Fletcher, at the phenomenal rate of $25 per annum, up to 1899, when it suddenly collapsed from lack of financial support. During 1900-1902, an attempt to carry on, with very restricted material, was made in France, under the title "Bibliographia Medica," edited in three successive volumes by Drs. Marcel Baudouin, Charles Potain and Charles Richet (Paris). In 1903 the American *Index Medicus* was revived by the Carnegie Institution of Washington, which published the Second Series (vols. I-XVIII, 1903-1920) and the Third Series (vols. I-VI, 1921-1926). During the forty-six years of its existence (1879-1926), the *Index Medicus* comprises forty-five, or, including the French publication, forty-eight volumes.

In January, 1916, the American Medical Association published the first number of its *Quarterly Cumulative Index to Current Medical Literature*. This journal introduced several important improvements in medical indexing. Like the Surgeon General's Catalogue, the new *Quarterly* indexed itself as to both authors and subjects; furthermore, by cumulation of the first three quarterlies in succession, the last quarterly of each year became, in effect, the completely indexed volume. Both author and subject titles were given in English, the former of utmost brevity in the earlier volumes, the latter more expansive. The arrangement of the material on the page was the best possible for ready reference, and the exploitation of type had been carefully thought out with regard to perspicuity. The new *Quarterly* thus became immediately popular among research workers and reference librarians. Here, in fact, was a new departure and along lines for which the world had long waited; viz., an automatic system of self-indexing, which dispensed with the cumbersome index to an index, whether of authors or subjects or both. The gain in checks on accuracy through the full-time service of a large personnel was also of moment. The only drawback to the new publication was the relatively small number of periodicals indexed, 157 in 1916, 326 in 1926. The A. M. A. *Quarterly* made the strongest appeal for current usage. The *Index Medicus* had, as covering all the material, the optimum survival value for the future. At the same time, it became obvious to all interested that there was an enormous duplication of labor, effort, administration, expense, paper, printers' ink and consumption of time in the preparation and publication of two large and costly periodicals covering much the same ground. The manifest destiny of the two journals was fusion, but even tentative consideration of this idea was out of the question after the event of April 6, 1917, when both the American Medical Association and the Carnegie Institution of Washington became immersed in wartime activities.

ADVANTAGES OF FUSION

The *Index Medicus*, in the wording of Army Regulations, "is not a governmental document" but a periodical supplement to the Index Catalogue, and was prepared for the press from the start as an extra-official activity. The entries were copied from the library cards by outside people; the redaction of copy and proofreading of

the journal and its indexes were done by the editors as night work outside the Library. In the early days of the eighties and nineties, the monthly numbers seldom averaged more than 50 or 60 pages, the volume (say in 1894) covering about 600 pages or about 12,000 to 15,000 titles. By "sporting oak" and denying himself to visitors, it was possible for Dr. Fletcher to run off a monthly number for the printers in a single evening. With greatly restricted material, the French Index Medicus of 1900-1902 covered 974, 1,128 and 888 pages, respectively. In 1903, the revived *Index Medicus* covered 1,065 pages, exclusive of the author and subject indexes; in 1913, 1,448 pages; in 1914, 1,311 pages. The cost of the journal since 1903 has thus been always considerably in excess of the liberal annual grant made by the Carnegie Institution of Washington. This question of extra expense became of moment in 1913, but the situation was saved by the European war, which greatly cut down the output of worthwhile medical literature in the warring countries, while, during the lean years following the war, the exclusion of the trashier sort of literature which then abounded was a genuine public service. At the same time, this extraordinary proliferation of periodical medical literature, amounting to more than twice the quota of 1894, vastly increased the probabilities of error in copy and proofs, while the reliable personnel employed was decreasing annually through death or other unavoidable contingencies. In 1921, owing to the impossibility of acquiring suitable personnel to carry on the annual Subject Index, the old subject arrangement of 1879-1920 was discarded, and the *Index Medicus* began to index itself quarterly as to subjects (in alphabetical order). The expensive and cumbersome Author Index was perforce retained. The American Medical Association, meanwhile, possessed the advantages of numerous and efficient personnel, rapid and effective press work, and administrative facilities for making the combined Index more widely useful and continually valuable.

THE COMBINED JOURNAL

In addition to indexing itself alphabetically as to authors and subjects, the salient features of the new index are that (1) it combines the best features of the classification of the *Index Medicus* and the *Quarterly Cumulative Index;* (2) the author titles are now given in full in the original languages, with the exception of titles in the Slavic, Scandinavian and Oriental languages, which are presented in English translation; (3) the subject entries are brief English abstracts of the actual content of the articles in question, without references to the titles, unless the latter happen to be accurately descriptive. It is the hope and belief of the editors that, in the long run, the latter device will awaken medical authors and editors to the advantage and necessity of providing all articles in medical periodicals with accurate descriptive titles, since papers of real import and value are submerged and actually lose themselves under titles which are ambiguous, obscure or misleading. In aid of this matter, the classification-rubrics are chosen with the greatest care, again, with reference to the actual content of the articles, and these arrangements are further helped out by a liberal system of cross references, which was not possible in the *Index Medicus*. The new books of the quarter are presented, for ready reference, both by authors and by subjects and with prices attached, on page 2 of the new Index. There follow an alphabetical list of publishers of the books and periodicals indexed (American and foreign) and an alphabetical list of all the periodicals indexed, with full titles, names and (where possible) addresses of publishers. The number of current periodicals now coming into the Surgeon General's Library is about 1,925. They include all important periodicals of anthropology, biology, psychology and even those of chemistry, physics and general science which may publish articles bearing on medicine. Any unusual and worth-while books or articles of this character not apt to be featured through regular medical channels will be included if sent to the Chicago editor (American Medical Association).

MODULUS OF CLASSIFICATION

Beginning with 1879, the nomenclature and classification of diseases employed in the Index Medicus was that of the Royal College of Surgeons, derived, in turn, from the classification proposed by William Farr [1] in 1855. Naturally subject to many changes and additions incident to advances in modern medicine, this arrangement has stood the test of time. Its immense superiority over the older "botanical" arrangements, listed by Wunderlich in the appendixes to his History of Medicine, will become at once apparent to any one familiar with the classification of diseases (say) in the tenth edition of Osler's Practice, which really derives from Farr. In these days of interrelationship of all the applied sciences, in which even anthropology is in process of transformation through advances made in medicine, the proper classification of many complex titles of newer type becomes a matter of extreme difficulty or even delicacy. As only one entry of such titles could usually be made in the Index Catalogue or the *Index Medicus,* it became necessary in each case to find the center of gravity of the title, and this modulus of classification, like other moduli, was quantitative, i. e., had to turn on actual or apparent weight (some preponderant feature) in the scale of relative importance. Thus, articles on the oculocardiac reflex or the effort syndrome (D. A. H.) or "Latent Cerebral Tumor in a Case of Epilepsy Treated by Luminal," found their places automatically under Reflex *(Oculocardiac),* Heart *(Neuroses)* or Epilepsy *(Pathology).*

In the *Index Medicus,* because of the high cost of printing, no cross references to the collateral subjects could be made. In the new *Quarterly Cumulative Index,* however, titles of this type, if sufficiently important, are actually duplicated or triplicated under the collateral rubrics, which makes fuller bibliographies under important headings. When not employed as title-rubrics in the new journal, the Index Catalogue rubrics of the Washington classification are protected by ample cross-references. For classifiers of medical literature, perhaps the most bothersome, boresome and baffling titles are those in which two or more seeming disparates, (such as cancer and tuberculosis) are linked together. The general formula of this abundant class ("something-or-other and something else") is as laughable in its stereotypy as the pattern which was put to such liberal usage in novels of the Damnation-of-Theron-Ware type. In the *Quarterly Cumulative Index,* which employs not one but several moduli of classification, the difficulty attaching to these double-barreled titles is obviated by printing them under both disparates or otherwise covering one disparate by a cross-reference. Thus, in the January-March number of the new journal,

1. Farr, William: Compt. rend. Cong. internat. de statist., 1855, Paris, 1856, pp. 147-168.

the article by Adamantiadis will be found under "Trachoma" and "Keratitis," that by Agnoli under "Diabetes, Insulin in," and "Diuresis," with reference to the former from "Insulin," that by Albrecht (O.) and Ranzi under "Achondroplasia" and "Spinal Cord Compression."

HOW TO USE THE NEW INDEX

For research workers, the classification of the *Index Medicus* of 1879-1926 is identical with that of the Index Catalogue. In other words, references to the total medical literature of the years 1879-1920 will be found in the annual subject index of the *Index Medicus* for these years, and in the self-classifying arrangement of the four quarterly numbers for the period 1921-1926. The same thing applies to the *Quarterly Cumulative Index* of the decade 1916-1926, for the limited number of periodicals covered during these years. Beginning 1927, the *Quarterly Cumulative Index Medicus* will cover all the medical and scientific periodicals on hand in the Surgeon General's Library, numbering 1,925. Mercifully for the medical profession, not all these 1,925 periodicals are indexed or deserve to be indexed. An astounding percentage of recent medical literature is piffle. But any worthwhile scientific periodical of today, even of subjects like anthropology, geography, philology or mathematics, may contain an occasional medical article of value, and this kind of indexing will be extended shortly to the scientific and secular periodicals in the Smithsonian Library and the Library of Congress. Foreign book titles are catalogued for the new Index directly from the descriptive trade lists.

How to use all this material? Suppose your subject is the pituitary gland. Look for the literature in its alphabetical place, then follow up, as in the Index Catalogue, with such cross-references as are germane or essential; e. g., Acromegaly, Endocrine Glands, Hypothalamus, Infantilism, Obesity. If it is Hydrogen Ion Concentration, then follow up with Acid-Base Equilibrium, Acidosis, Alkalosis, Blood, Cerebrospinal Fluid, Urine and so on. To get the maximum usage out of the Quarterly Index, familiarize yourself with the essential features of its classification beforehand and follow up all the cross references. Foreign readers who cannot cope with the English titles under the subject rubrics will find the full title in the original language under the author entries. On account of the large amount of 1926 literature on hand during January-April, 1927, the quarterly will not attain its full stride into the 1927 literature until the first cumulative volume is published in July, 1927. This overlapping of material at the beginning of each year is unavoidable, by reason of the large amount of foreign literature which does not reach American libraries until comparatively late in the year. In looking, therefore, for references allocated to a certain year (say 1927), consult the volumes for the given year (1927) and the succeeding year (1928). Successful research depends on the worker as well as on the index. In the words of the late President Woodward of the Carnegie Institution: "The scientific specialist who does not know more of his subject than a bibliographer can teach him is not worth his salt."

ENVOY

The curse of recent medicine is the gigantic, senseless proliferation and prolixity of its periodical literature. It has been the despair of librarians, the enslaver of indexers, the nightmare of classifiers, the bugbear of editors, and, even in Dr. Fletcher's time, was the occasion of his celebrated witticism: "The whole world is in a conspiracy against medical bibliographers." It is a consequence of the self-determination mania which "infects the world" and the end is not yet, for there are as many "new" sciences as there are up-and-coming nations. Some day there may be minor Nobel prizes or *prix Monthyon* for those who decline to write unless they have something really new to say and who can state their intention in titles of telegraphic brevity.

In 1926, as stated, it was decided by the authorities of the three organizations concerned that the *Index Medicus* and the *Quarterly Cumulative Index* were

> This day to be conjoined
> In the estate of honorable marriage.

The natural consequence of lawful matrimony made its appearance within the statutory time, and it is no exaggeration to say that the young hopeful, in the words of our leading humorist, was ushered into the world "to the tune of sweet, soft music. There was no harsh bawling from below. There was dulcet twittering from above." Mayhap there was even "rejoicing in heaven," for, with the retirement of the parents, there was to be one medical journal the less in the world. The *Quarterly Cumulative Index Medicus* represents, as stated, the culmination of an effort, long since contemplated, to save the duplication of expense, labor and time consumed in the production of two large and costly periodicals covering much the same material. As combining the best resources available and as employing the most advanced and labor-saving methods of medical indexing, the new Index deserves, therefore, the hearty and unqualified support of the entire medical profession all over the world. May we auspicate its future in the ancient invocation, *quod felix, bonum faustumque sit.*

Army Medical Library.

New and Nonofficial Remedies

THE FOLLOWING ADDITIONAL ARTICLES HAVE BEEN ACCEPTED AS CONFORMING TO THE RULES OF THE COUNCIL ON PHARMACY AND CHEMISTRY OF THE AMERICAN MEDICAL ASSOCIATION FOR ADMISSION TO NEW AND NONOFFICIAL REMEDIES. A COPY OF THE RULES ON WHICH THE COUNCIL BASES ITS ACTION WILL BE SENT ON APPLICATION. W. A. PUCKNER, SECRETARY.

CROTALUS ANTITOXIN.—An antitoxic serum prepared by immunizing animals against the venom of snakes of the crotalus family.

Actions and Uses.—Evidence has accumulated to show that the venom of certain snakes may be neutralized by the employment of a serum obtained from animals that have been injected with venom from a snake of the same family. Crotalus antitoxin is used to neutralize the venom injected by the bite inflicted by members of the crotalus family.

Dosage.—The serum is administered intramuscularly; but in cases seen late or in the presence of severe symptoms it may be administered intravenously.

H. K. Mulford Company, Philadelphia.

Antivenin (Nearctic Crotalidae).—North American Anti-Snake-Bite Serum.—An antitoxic serum prepared by injecting horses with venoms from serpents of the North American species of the family *Crotalidae* (Rattle Snake, 75 per cent; Copperhead, 12½ per cent; and Water Moccasin, 12½ per cent). It is claimed to have neutralizing effect against the venom of the species represented. The venom is extracted from the snakes and promptly desiccated. The mixture of the venoms is injected subcutaneously into horses in fractional doses until immunity is established. The animal is bled, and the plasma is concentrated by a salting out process. The potency of the product is determined by tests on pigeons, the maximum amount of venom neutralized by 1 cc. of the serum being taken as the titer of the product.

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THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION

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SATURDAY, JULY 2, 1927

ACTION OF THE PARATHYROID HORMONE

Current writers reflect the conviction that the parathyroid glands produce a hormone that is indispensable to the organism. Its function is sometimes described as that of "mobilizing" the calcium of the body, a statement scarcely more illuminating than the outworn expression "diathesis" as applied to obscure conditions of disease. Probably a more specific description would at present allocate to the parathyroid hormone the regulation of calcium metabolism through the control, in some way, of the concentration of calcium in the circulating blood. The mode in which this regulatory influence becomes effective has been debated, the available evidences being inconclusive at present. The possibilities have been briefly summarized by Stewart and Percival,[1] who state that "clearly the parathyroids may affect the absorption or excretion of calcium, or may exert some controlling action on the equilibria between the different forms of combination in which calcium exists in the blood and between the concentrations in the blood and in the tissues."

The intake factor can be easily disposed of: In view of the ease with which the low serum calcium of tetania parathyreopriva can be raised by administration of calcium salts, it appears unlikely that the parathyroids act by controlling calcium absorption. Furthermore, in the latest experiments at the University of Edinburgh [1] it has been noted that administration of parathyroid hormone produces a rise in the content of calcium in the blood serum even after exclusion of external sources of the element through evisceration. In other words, since the hormone can exert its full action on the serum calcium even after complete removal of the alimentary canal, it is concluded that the action does not consist in controlling the rate of calcium absorption. Again, after the administration of parathyroid hormone, and while the serum calcium is high, there is no diminution in the excretion of calcium. The parathyroids, therefore, do not act by controlling the rate of excretion.

By a series of successive exclusions of important organs, Stewart and Percival have found that the liver, spleen, pancreas, pituitary, thyroid and central nervous system do not appear to have any special function in connection with the effect of parathyroid on the blood calcium. As increase in the serum calcium takes place under the influence of parathyroid hormone without any diminution in the excretion and without the possibility of any absorption from the alimentary canal, the seat of action must be shifted elsewhere. As the Scotch investigators conclude, the calcium drawn into the blood when parathyroid is administered must come from the soft tissues, from the bones or from both. They incline to the belief that the parathyroid hormone controls the distribution of calcium between the blood and the tissues by regulating the proportion of the total serum calcium that is readily diffusible. Such stress on the physicochemical condition of the elements in relation to their availability and "mobility" in the organism represents a decidedly modern tendency.

1. Stewart, C. P., and Percival, G. H.: Studies on Calcium Metabolism: I. The Action of the Parathyroid Hormone on the Calcium Content of the Serum and on the Absorption and Excretion of Calcium, Biochem. J. **21**: 301, 1927.

ACROMEGALY AND METABOLISM

The dominant rôle of the thyroid in the regulation of the basal metabolism, that is, the chemical changes or tissue combustions in the body that are independent of such influences as work and food, has become well established in recent years. Elaborate observations reported on several thousand persons with different diseases by Boothby and Sandiford [1] of the Mayo Foundation show that except in thyroid disorders and in leukemia there is little variation from normal of the basal metabolic level. A similar outcome is found in comparable studies at the Massachusetts General Hospital. For this reason the exact measurement of the basal metabolism has become significant in the diagnosis and management of thyroid disorder.

There have been suggestions that the suprarenals also have a calorigenic influence in the body through the liberation of epinephrine. Both epinephrine and thyroxin accelerate the heat production in the body. Precise explanation of the nature of the effect remains to be developed. The statistics for cases of Addison's disease, in which the suprarenals are defective, are too variable to afford a final answer regarding the actual rôle of the glands in normal heat production. With respect to a metabolic rôle of the pituitary in the energy exchange leading to heat production, the clinical evidence likewise has been confusing and conflicting. More convincing has been the experimental evidence secured from hypophysectomized animals which showed a marked lowering of basal metabolism in the state of hypopituitarism.[2] The possibility remains that any hormonal effects of the pituitary on heat production may be exercised indirectly through the thyroid.

1. Boothby, W. M., and Sandiford, Irene: Basal Metabolism, Physiol. Rev. **4**: 69 (Jan.) 1924.

2. Benedict, F. G., and Homans, J.: The Metabolism of the Hypophysectomized Dog, J. M. Research **25**: 409, 1912.

An unusually significant contribution in this field has come from the Surgical Service of the Peter Bent Brigham Hospital in Boston. Cushing and Davidoff [3] have formulated the conclusion that acromegaly is a disease which bears the same relation to pituitary insufficiency (hypopituitarism) that exophthalmic goiter bears to myxedema (hypothyroidism). It is, in other words, an expression of hyperpituitarism just as exophthalmic goiter is of hyperthyroidism. Acromegaly is often accompanied by an elevated basal metabolic rate and the reverse condition of hypopituitarism by a subnormal rate. Acromegaly, furthermore, may be accompanied by a palpably enlarged thyroid and by symptoms suggesting thyreotoxicosis to which the increased basal metabolic rate has generally been ascribed. The Boston surgeons further conclude that the chromophilic cells of the anterior lobe of the pituitary body secrete a substance which not only contains the hormone of growth but which is capable of raising the basal metabolic rate. Whether the hypophysial principle under these circumstances acts as a stimulus to metabolism directly on the tissues or only through the intermediation of the thyroid cannot as yet be positively stated, they add, although there are reasons to believe that it may act independently. At any rate, the pituitary can no longer be entirely neglected in relation to metabolic upsets in the organism.

LAVOISIER AND THE SCIENCE OF METABOLISM

The present year represents the sesquicentennial of the real beginning of the science of metabolism. In 1777 the French chemist Lavoisier—on whom later the ax of the guillotine fell during the Reign of Terror—described the exchange of gases in respiration. This was the brilliant investigator who demonstrated that respiration in the body and combustion outside it are essentially analogous processes in representing an oxidative change with water and carbon dioxide as by-products. In a brief memoir published in 1777 he enunciated the principles that during respiration it was only "air eminently respirable" (oxygen) which disappeared from the atmosphere when an animal was put into a confined space, and that this air was supplanted by expired "aeriform calcic acid" (carbon dioxide); that when metals were calcined in air, oxygen was absorbed until its supply was exhausted; that after an animal had perished in a confined space and the carbon dioxide in the atmosphere was absorbed by alkali the "foul air" remaining was the same kind of air as that found after metals had been calcined in air in an enclosed space. All the former qualities of this air could be restored by adding to it "air eminently respirable." [4]

From these pioneer experiments it was thus seen at once that respiration is oxidation; that air which has been respired resembles air in which a metal has been calcined, so far that it has lost a certain quantity of its oxygen. But Lavoisier went further than this, Sir Michael Foster [5] adds; he saw that there is an essential difference between air in which a metal has been calcined and air which has been breathed. The latter contains what the former does not, Black's fixed air, for it precipitates lime water. Lavoisier, unlike Priestly, with no veil before his eyes, did not see reason to doubt that this fixed air came from the lungs; and he recognized accordingly that in respiration there are two factors, the disappearance of oxygen and the appearance of fixed air.

It has lately been asserted [6] that although the details of the forms of respiration apparatus used by Lavoisier and his collaborators Laplace and Sequin are unknown, it seems probable, as pointed out by Tigerstedt, that they made use of the two principles which have formed the basis on which have been developed all subsequent types of apparatus for the determination of the respiratory exchange. A busy world in which the science of nutrition has come to play a significant part toward the promotion of human welfare may well pause to pay a tribute of respect to the initiating spirit in its development. Lavoisier's untimely death is one of the unnecessary tragedies of history. Through his cruel execution, as Foster has masterfully expressed it, there passed away from this world, in his fifty-first year, this master mind of science, who had done so much to draw aside from truth the veil of man's ignorance and wrong thought, and there passed away too the hope of his drawing aside yet other folds of that veil, folds of which perhaps wrap us round even today.

THE PROTOPLASMIC REACTION OF LIVING CELLS

The student of physiologic functions can scarcely fail to be impressed by the nicety with which certain chemical reactions in the organism are conducted. Perhaps the most conspicuous instance of this is represented by the neutrality regulation whereby the blood maintains its remarkable fixity of reaction. According to Myers and Booher,[7] for example, the normal range of p_H for the blood probably lies between 7.35 and 7.43, values lower than 7.32 and higher than 7.47 being definitely abnormal. The maximum tolerated range is said to lie between p_H 7.0 and 7.8. To preserve this type of "normality" a variety of corrective or compensatory devices are at the disposal of the organism.

Resistance to changes in hydrogen ion concentration is brought about by buffer action. A buffer has been compared to "a sponge having the capacity of 'soaking up' hydrogen and hydroxyl ions." The buffers of the

3. Cushing, Harvey; and Davidoff, L. M.: Studies in Acromegaly: IV. The Basal Metabolism, Arch. Int. Med. **39**: 673 (May) 1927.
4. The quotation is taken from a monograph by Graham Lusk: A History of Metabolism.
5. Foster, Michael: Lectures on the History of Physiology, Cambridge, 1901.
6. Boothby, W. M., and Sandiford, Irene: Basal Metabolism, Physiol. Rev. **4**: 69 (Jan.) 1924.
7. Myers, V. C., and Booher, L. E.: Some Variations in the Acid-Base Balance of the Blood in Disease, J. Biol. Chem. **59**: 699 (April) 1924.

blood are salts of weak acids—the bicarbonates, phosphates and alkali salts of the proteins, including both hemoglobin and oxyhemoglobin. In addition to these safeguards there is the capacity of the body to excrete acid quite promptly through the kidneys, the volatile carbon dioxide being eliminated by the lungs. Furthermore, the organism seems to have base in latent forms ready to mobilize for meeting an acid emergency.

Whether the tissues themselves, and particularly the living cells, are equally capable of preserving their reaction unchanged within narrow limits has not been clear. It has long been known by students of biochemistry that when cellular tissues are crushed and examined by chemical methods an acid reaction speedily develops and may progress in intensity. Localized acidity of this sort has been regarded as a sign of tissue injury, likewise of circumscribed deficit of oxygen. The consequences are sometimes apparent in localized abnormalities, as in the case of so-called Zenker's waxy degeneration of muscles. It can even be produced by excessive stimulation of the contractile tissue, whereby acid is formed faster than it can be removed.[8] A noteworthy contribution to our knowledge of intracellular reaction has been made by Chambers[9] and his co-workers at Cornell University Medical College. Through their development of an elegant microsurgical technic it has become possible to inject into single cells indicator dyes that cannot penetrate them from without. Chambers has observed that the protoplasm tolerates only a limited amount of the injected fluid. If too much is injected the protoplasm undergoes visible disintegration, with the production of an acid which the dye immediately registers. As long as the cell remains alive, the final tint in the protoplasm is always the same.

The new determinations of hydrogen ion concentration have already been made on the cells of ciliated epithelium, gastric and intestinal mucosa, liver, pancreas, striated muscle, and unripe ova. The p_H values obtained were the same for every cell: 7.5 ± 0.1 for the nucleus, both normal and injured; 6.9 ± 0.1 for the normal cytoplasm, and 5.3 ± 0.2 for the injured and cytolyzing cytoplasm. It is already apparent that the living protoplasm of widely differing types of cells under normal conditions apparently has a remarkably constant p_H value, which is slightly on the acid side, while the nuclear p_H is distinctly on the alkaline side of neutrality. Injury produces an increased acid reaction in the cytoplasm but does not affect the p_H of the nucleus. This affords a further striking illustration of the relatively unchanging environmental reaction in which the functions of living matter are carried out. It also enables one to appreciate better how and why seemingly insignificant uncompensated changes in the movement of acids and bases may lead to physiologic disaster.

8. Wells, H. G.: J. Exper. Med. **11**: 1, 1909.
9. Chambers, R.; Pollack, H., and Hiller, S.: The Protoplasmic p_H of Living Cells, Proc. Soc. Exper. Biol. & Med. **24**: 760 (May) 1927. Chambers, R., and Pollack, H.: J. Gen. Physiol. **10**: 739, 1927.

Current Comment

DISGUSTING MEDICAL ADVERTISING

The medical profession is now being circularized with an illustration advertising presumably "Proveinase Midy." The circular shows a disproportionate naked Hercules, whose genitals are at least not inconspicuous, and a depressed naked female, in a somewhat September morn pose, whom the Hercules seems about to energize with "Proveinase." The name Midy has meant little that is inspiring to the American medical profession. Santal-Midy is merely sandal oil capsules that are no better than any others. Their exploitation is largely by way of posters in public toilets. What an insult to the medical profession that any firm should think that the picture referred to would appeal to its members! Such advertising merits only contempt and resentment.

IRRADIATED MILK

The newly discovered power of ultraviolet rays to confer antirachitic properties on various types of food is so astounding that the scientific world has scarcely recovered from the surprise and elation that followed the first announcements. The possibility, reported in a recent issue of THE JOURNAL,[1] of making a few milligrams of an isolated organic substance acquire, through exposure to suitable brief irradiation, an antirachitic potency equivalent to that of an entire quart of good cod liver oil fires the imagination and inspires an increased respect for the importance of "little things" in nutrition. Ultraviolet rays are, however, not to be regarded merely as a sort of plaything in the hands of untutored persons; nor should they become a tool for quacks. In a warning[2] against wholesale or hasty irradiation of foods it was pointed out that undue exposure to ultraviolet rays may actually produce deterioration in foods, so that great caution and expertness must be used in securing the desired beneficial results. Such warnings should not be allowed, however, to obscure or minimize the successful endeavors. In 1925, a group of investigators[3] at the University of Wisconsin demonstrated that, by exposure to the radiations of a quartz mercury vapor lamp, the antirachitic properties of cow's milk were increased eight or more times. Under the same conditions a sample of goat's milk increased in activity about twenty-four times. This increase in activity can also be induced rather promptly, though to a lesser degree, by direct irradiation of the animal. Supplee and Dow[4] have recently demonstrated a comparable effect on dried milk, to which irradiation imparts measurably greater antirachitic and calcifying properties; and this is true not only for winter-produced milk, which is usually comparatively poor in antirachitic potency, but also for

1. Ergosterol, a Precursor of the Antirachitic Vitamin, editorial, J. A. M. A. **88**: 1969 (June 18) 1927.
2. The Danger of Irradiating Foods, editorial, J. A. M. A. **88**: 1485 (May 7) 1927.
3. Steenbock, Harry; Hart, E. B.; Hoppert, C. A., and Black, A.: Fat-Soluble Vitamin: XXVI. The Antirachitic Property of Milk and Its Increase by Direct Irradiation and by Irradiation of the Animal, J. Biol. Chem. **66**: 441 (Dec.) 1925.
4. Supplee, G. C., and Dow, O. D.: The Antirachitic and Calcifying Properties of Summer- and Winter-Produced Dry Milk, Irradiated and Nonirradiated, J. Biol. Chem. **73**: 617 (June) 1927.

milk produced under the better natural conditions that prevail in summer. The potential capacity of milk for calcifying properties is not fully attained under the natural conditions of production. Apparently the utilizable increment of antirachitic potency imparted to winter-produced milk by irradiation is greater than the utilizable increment imparted to the summer product. The results of Supplee and Dow appear thus to confirm the existence of a significant interdependence between antirachitic properties and the degree of ultraviolet radiation to which the product itself, or its synthesizing agent, the body of the cow, has been exposed. These advantages of irradiation can be secured, under proper conditions of treatment involving only a brief exposure to ultraviolet rays, without impairment of the other nutritive properties of the milk.

THE SOCIETY FOR EXPERIMENTAL BIOLOGY AND MEDICINE

Nearly a quarter of a century ago, on January 19, 1903, a small group of scientific investigators in New York met at the call of Professor Graham Lusk and the late Dr. S. J. Meltzer to consider the organization of active workers in experimental biology and medicine. This was the meeting that initiated the Society for Experimental Biology and Medicine under the presidency of Dr. Meltzer. The main object of the organization was the cultivation of the experimental method of investigation in the sciences of experimental biology and medicine. Membership in the group was limited to persons who had completed some meritorious independent experimental research in that field of study. The programs, from the start, consisted in brief presentations of the essential features of experimental investigations, and frequently of demonstrations of actual experiments. The membership soon outgrew its confinement to "Greater New York" and spread throughout the country. One reason for the success that has attended the development of this society lies perhaps in the significant circumstance that it has aimed to bring together workers in many fields, such as physiology, biochemistry, biology, bacteriology, pharmacology and experimental medicine, at a time when rapidly developing specialization had already begun to segregate investigators into small groups. The new society thus represented a wholesome reintegrating force and provided a stimulus for the discussion of "borderline" and interrelated problems. It has become an influence tending to overcome the danger of narrowness in the present-day outlook on the natural sciences with which medicine is so closely bound up. Another early object of the society was the development of high standards of presentation and scientific criticism. Incidentally, not a few significant discoveries have been announced for the first time at its meetings. As might be expected, this movement was bound to be followed by similar endeavors elsewhere. Many of them have resulted in the organization of branches of the society. Today ten branches are located all the way from New York to Peking; eight more are at present under contemplation. The contributions, in the form of brief, concise summaries, are embodied in the *Proceedings of the Society for Experimental Biology and Medicine*, which is available through subscription. This journal deserves the active support of members of the medical profession, who are likely to find it stimulating and informative. Published without special endowment and maintained by the contributions of scientific workers, it needs and enlists the help of those who can benefit by its program.[1]

Association News

CONFERENCE ON PUBLIC HEALTH

Held in Chicago, March 24-25, 1927

DR. WENDELL C. PHILLIPS, New York, President of the American Medical Association, in the Chair

MARCH 24—MORNING

Preventive Medicine and Health Education

DR. WENDELL C. PHILLIPS, New York: Two basic ideas must necessarily prevail in any properly conducted health conference; i. e., preventive medicine and health education of the public. The *why* of these problems needs neither discussion nor confirmation in this presence. We are not here to discuss the *why*, but it is within our province on this occasion to give wholesome consideration to the HOW of the problems. I modestly venture to suggest two keynote ideas which may well serve to guide our meditations, our deliberations and our discussions. The first is mutual and, hence, *better understanding*. The second is *team work*.

I would stress the important position which the American physician has gained not only as the personal and family councilor but as adviser in health and sanitation affairs. He necessarily is by tradition, education and experience qualified for this service. It seems unwise to inaugurate a health program in any community without first securing not only the support but also the active leadership of the local profession. The lack of such understanding and mutual effort has in numerous instances resulted in harm to the cause. We must admit that the education of the physician up to the present time has stressed disease and its treatment, rather than health and its preservation; nevertheless, the physician remains the only individual in the community with adequate basic knowledge available for service in health matters. We freely admit that changes in the curriculum in undergraduate medical schools are necessary. The student of medicine must be trained to treat the individual from the standpoint of health as well as that of disease. Such changes in medical education, of course, contemplate instruction in personal and community health education. We affirm a deep seated conviction that the family physician should remain the foundation of medical service. Our activities in preventive medicine and health education should be guided by principles and programs which will prevent duplication.

It is my sincere conviction that the medical profession should throw off its mask of reticence and its shrinking attitude toward reasonable publicity concerning health education. The House of Delegates of the American Medical Association is on record as favoring every proper method of public health education, including periodic medical examinations of the supposedly healthy. Our journal, *Hygeia*, published distinctly for the lay public, exemplifies the attitude of organized medicine toward this project. Clip-sheets from every issue of *Hygeia* are furnished to hundreds of newspapers. Furthermore, many of our great newspaper syndicates, great daily newspapers and reputable magazines refuse to publish any material pertaining to health except on reliable medical approval. Indeed, in health matters, many of these publications rely constantly on the advice received from the American Medical Association headquarters. Our future progress is not likely to be lacking in human effort and

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instrumentalities, but it will depend on the large amounts of money that may become available for its promotion. Millions and then more and more millions are needed. A higher average of overflowing good health means a higher average of happiness, comfort, usefulness and the economic value of the individual.

The Relations of the Physician to Public Health

DR. HUGH S. CUMMING, Surgeon General, U. S. Public Health Service, Washington, D. C.

DR. HARLOW BROOKS, New York.

DR. ARTHUR T. HOLBROOK, Milwaukee.

These three papers appear in full in this issue of THE JOURNAL.

DR. FRANK W. CREGOR, Indianapolis: The medical profession is the one body which has dedicated its life to a study of the science and devoted it to the practice of the art of healing. Medical practice presupposes individual service. While this is true, it yet remains that it is the one body qualified for public health work. Its ideals and traditions, its culture and the character of its citizenship compare favorably with that of any branch of society.

The medical profession through its organization is the one thing to which the state should look for aid and guidance in all its health activities and the physician who is employed as a health officer or as a commissioner for the state or officer for the county, city or municipality should receive the endorsement of the medical profession and the state should first demand this endorsement. The activities of its health officers should at all times reflect the composite view of the medical profession.

The health department of the state and the medical profession through its organization should make an earnest mutual effort to come to a common understanding. The medical profession needs this as a means of discharging its public obligation. The health department needs it if it is to keep its professional point of view clear and accomplish its great purpose. An annual conference between the health department and some authorized body representing the medical organization would be helpful. The results of this would be reflected down through their separate organizations to the county units. A health officer should be as anxious for the support of his local medical society as for the approval of the health department. The health department simply represents a means of applying the knowledge of the medical profession for the public good. Perhaps the medical profession, which can speak collectively only through its organization, has been timid and hesitated to thrust its views on the state, feeling that the state should come to it. Possibly the state, because of its limited knowledge of the medical organization, has not thought of approaching it. I encounter physicians who decry any activities on the part of the medical organization which might be construed in any way as political. I have also observed that they are the ones who criticize most and wail loudest about existing conditions. I believe that proper activities along these lines are the very best evidence of good citizenship. To my mind, if the relations of the physicians to public health can be worked out along these lines where the activities of the health department can represent the composite views of the medical profession in matters pertaining to the public health, it will be safe, sane, efficient and satisfactory.

PRESIDENT PHILLIPS: The discussion of these papers should be most interesting, and the opportunity will be given at the opening of the session this afternoon.

MARCH 24—AFTERNOON

DISCUSSION ON PAPERS OF DRS. CUMMING, BROOKS, HOLBROOK AND CREGOR

DR. GEORGE M. FISHER, President, Medical Society of the State of New York, Utica: We in New York State, like all other states in the Union, have had more or less trouble with our lay organizations. That led me to think that perhaps there was some ground on which the medical profession and the lay organizations could get together. The result was that I talked it over with the State Charities Aid and the Milbank Foundation and they extended to the medical profession a most hearty greeting, and agreed that they would form a committee and meet with a similar committee from the state society. Now the proposed discussion brought before that committee was, first, in all communities there exists a large amount of illness and poor health which does not seek and, therefore, does not receive medical diagnosis and treatment, at least not at a favorable stage. Second, important new discoveries and improvement in preventive medicine should be made available at the earliest practical time to all persons seeking medical aid. Third, sound public policies demand that all persons, irrespective of residence, should have available the essentials of reasonably good medical diagnosis and care when ill. Fourth, the continued economic security and well being of the medical profession is an essential factor in meeting the preceding condition. Fifth, in all health clinics and activities, the service of local physicians should be utilized and remunerated except where special skill or service is required. Sixth, no responsible person seriously proposes or has proposed the introduction of an actual system of state medicine in the state of New York. Seventh, in order to conserve the largest usefulness and economic well being of the medical profession, and at the same time to bring progressive measures for the protection of health to the population generally, and to the interests of the population, to the medical aid, both curative and preventive, it is highly important that definite understanding should be reached between those whose primary interest is the practice of curative medicine, and those whose primary interest is the promotion of preventive health activity. As a tentative base of such an understanding the following are suggested for discussion: the tuberculosis program, which met with a very liberal discussion, and then the mental hygiene program, the prenatal care, child health program, social hygiene program, and lastly communicable diseases. In all these discussions the physician was foremost in place. The work of this committee has so far been so successful that it is my intention to propose to the state medical society that a permanent committee be appointed to be known as the Public Relations Committee, the object of which is to deal with public organizations, lay organizations and societies as well as the health authorities of the state. Furthermore, I propose that in each county society there should be organized also a public health committee whose relations shall be in connection with that of the state society and work along the same line.

MR. HOMER FOLKS, State Charities Association, New York: No lay organization, so called, concerning itself with health or even with the relief of distress and poverty, which is what they all began with, is composed of laymen alone, to the best of my knowledge. They all have physicians in their membership, on their boards, on their executive committees. We don't particularly object to the term "lay organization" except that we like it borne in mind always that no lay organization, that I know anything about, ever does anything in the scientific line, ever adopts a policy, ever takes any action of any sort or description that borders on a technical character, without the most minute and authoritative direction from its medical people. As to the particular organization to which Dr. Fisher refers, the State Tuberculosis and Health Committee of the State Charities Aid Association, we have concerned ourselves since 1907 with the prevention of tuberculosis in the state of New York, outside New York City. We also have a state mental hygiene committee, active in the state as a whole. We have distinguished psychiatrists and distinguished sanitarians on that committee. We are proud of the fact that though we have published millions and millions of circulars, leaflets and publications dealing in a popular way with scientific facts, we have never been called on to retract or modify during that thirty-year time any statement we have made because of any technical or scientific inaccuracy. I mention that merely to show the standing and ability of the medical men who have guided us, and of the extent to which we have been glad to be guided by them. I became firmly convinced a couple of years ago that most of the difficulties between the medical practitioners and health organizations, public or private, arose because they all approached the subject, as Dr. Brooks unfortunately did,

from a rather general point of view. A year ago we had the pleasure of meeting informally several times with several members of the state society to see if we didn't agree, as Dr. Fisher mentioned, on the details of the tuberculosis clinics, what patients should come to them, and so on. Somewhat to the surprise of some of us, we found we didn't differ at all about the actual, practical, concrete content and the desirable modes of operation of those activities; so that we were delighted to receive Dr. Fisher's informal suggestion last fall of such a conference committee meeting now officially and in a representative capacity. We have found no real difficulty at all in covering the field, so far as we know it, and in arriving at entirely unanimous recommendations to be made by Dr. Fisher's committee to the state society, by our committee to the state-wide health group.

DR. JOHN A. KINGSBURY, Milbank Memorial Fund, New York: There are probably just as many varieties of social workers as there are of doctors. I think that the President of the American Medical Association and the president of the New York State Medical Society have marked the beginning of a new epoch by arranging for conferences where physicians and public health workers get their feet under the same table, and begin to understand one another. I yield to nobody in my admiration of Dr. Brooks as a physician, but not as a judge of social workers. I want to record a little bit of history. I talked about a little Cattaraugus County difficulty with Dr. Phillips when I had the pleasure of lunching with him one day in New York. I said, "We must find a way to promote better understanding between doctors and public health workers," and it was only a day or two after that he called me on the telephone and said, "Dr. Fisher is in my office." Dr. Fisher came to the telephone and made a suggestion, which he said he and Dr. Phillips had been talking over. I transmitted that information to Mr. Folks. Out of that incident grew the Public Relations Committee of the New York State Medical Society, which has been meeting with a similar committee of the New York State Charities Aid Association selected by Mr. Folks. I think that ought to be on the record, because it may usher in a new epoch in medical and public health relationships.

Twenty years ago I started organizing the voluntary committees on tuberculosis prevention in New York State. I went out with my instructions from the chief who just preceded me. The first thing at the head of the list of instructions was: "Go and see the president of the county medical society; consult with the county medical society." We never failed to do it. The first thing we did in Cattaraugus County was to consult with the county medical society. There are about sixty-eight members scattered over 1,300 square miles of the county; some bad roads, very bad roads; doctors busy, very busy; and eight or ten is a large attendance at one of those meetings. We came out all right with those ten; we got started harmoniously. The president of the society came to the general meeting at which the plans were approved. Two members of the county medical society were put on the county board of health, and all seemed well; but it wasn't quite well. So, about three years later, there was a little blow-up at a meeting at which about twenty-one members came together. Later when they assembled a still larger meeting, after getting together as Dr. Fisher has suggested, after smaller group meetings, promoting an understanding of what was doing, the county medical society at this larger meeting passed a resolution endorsing the county health unit, and the general program that was being carried on with the aid of the Milbank Foundation but carried on by the local agencies, under the supervision of the State Charities Aid Association. We have gotten together and apparently all is well, but all will be well there as time goes on only if we succeed in understanding one another.

DR. HENRY F. VAUGHAN, American Public Health Association, Detroit: Mr. Kingsbury spoke of the situation in Cattaraugus County where there were brought together representatives of the medical society. Of some sixty-eight members of the society only eight came, and those eight who came fully comprehended and understood the situation and were willing to cooperate. The sixty who didn't come, didn't understand, were ignorant of the situation, and instead of cooperating they were antagonistic until they could be reached. The same thing is true in every part of our country. When we meet with representatives of the medical society we soon have their confidence. They see that we are able to get around the same table and put our feet under the same board and understand one another, but it is very hard to reach those sixty other physicians who do not come to such meetings. It seems to me that the American Medical Association has a wonderful opportunity to reach those sixty men, and that if you are going to do anything constructive there ought to be some central bureau or authority in the American Medical Association which can interest those sixty men in local public health work. I feel it in my own community, and I am sure every other health worker does. We can reach them, but it requires continual prodding and propaganda work on our part. It needlessly takes a lot of our energy, and it is a waste of time, because we get such trifling results. If the American Medical Association could have through its Council on Health and Public Instruction or through some other agency a well defined method of reaching these other physicians in exactly the same way they are reaching the public through *Hygeia* and through propaganda work, we could get the sixty men back of the public health problem. It seems to me that it would be a great mistake for this gathering to adjourn without working out at least some tentative program whereby the representatives of the various lay, nonofficial and official agencies and, above all, the private practitioner in medicine can have a common meeting ground, and that common meeting ground should start at the very top. The relationship between the American Medical Association, the American Public Health Association and the official social agencies at the present time is virtually nil. There should be a common understanding from the top right down to the bottom, with some line of organization, so that we feel the impulse and the effect of such a cooperative movement way down to the smallest unit.

DR. C. A. HARPER, State Health Officer, Madison, Wis.: As was just stated, public health officials fully realize that the cooperation of the medical profession in the main is essential to successful aggressive public health work. I desire to emphasize the necessity of the medical schools adding a stronger and more basic branch of the essentials of public health as a part of their regular curriculum. It has been shown in this discussion that the divergencies between public health officials, small as they are, and the medical profession is more through misunderstanding than it is in actual opposition.

DR. W. S. LEATHERS, Professor of Preventive Medicine, Vanderbilt University School of Medicine, Nashville, Tenn.: I did not get just the reaction from the paper of Dr. Brooks that has been expressed by the speakers who have discussed it. It seemed to me that the question was discussed by him from a broad point of view as related to the practitioner of medicine and I do not think that he meant to imply that there were not capable social workers just as there would be efficient workers in every legitimate field of endeavor. It appears to me that this paper, in the main, was stimulating and constructive. In the state in which I served as state health officer for fourteen years, I made it a principle of administrative procedure not to undertake health work faster than I could obtain the intelligent cooperation of the medical profession. It seems to me that this is fundamental. When I left the state (if you will pardon me for the personal reference), I believe as many as 95 per cent of the physicians were supporting the state health work. I have found practitioners of medicine my best friends. An effort was always made to confer with them concerning community health problems and secure their support. When differences occur between the profession and public health workers it is usually the result of misunderstanding. This conference is a forward movement for bringing about better conditions between official and nonofficial agencies in relation to the practitioner of medicine.

DR. S. J. CRUMBINE, American Child Health Association, New York: Dr. Holbrook of Milwaukee expressed my sentiments. I am in accord with one single exception; that is the recommendation that only local men should be chosen for

health officers. Frequently that is impossible; it is extremely difficult many times, and I think often insures the failure of a program of public health.

Mr. James L. Fieser, American National Red Cross, Washington, D. C.: The experience of the organization which I represent has been an increasingly wholesome one in so far as its relationship to the medical profession is concerned. In the first place, the Red Cross through its 3,500 or so local branches has doubtless enlisted the service of many thousand physicians; just as in its work in special health fields, such as first aid, many thousand physicians have been constantly engaged in instructional work of a public health sort. Incidentally an examination of our instruction and literature will indicate an urge oft repeated that the local medical societies be taken into account. We have found by experience in time of disaster, for example, that after the first emergency has normally been taken care of by physicians in the community and those who came in, such affiliation is invaluable. In the field of general health activities, such as home hygiene and care of the sick, every effort is made to make clear that the instruction given is merely an aid and not a substitute for the more thoroughgoing work which only a physician can give. In other words, it is designed to give to the physician, in the aggregate throughout the United State, an intelligent lay support when he goes into the home of that one individual representing 500,000 women who have satisfactorily completed such a course today. Within ten years, through local and Red Cross societies, one out of every three counties in the United States has inaugurated a public health nursing program, which again ties in definitely with an instruction that the nurse in nowise is to be a practicing person, but in every instance is to follow the instructions of a physician. Of course, in the case of the Red Cross, we have almost a threefold entity: first, a governmental one through which we have the counsel constantly of the surgeon generals, two of whom are represented on our central committee of eighteen. In the second place, we are a popular agency, and are therefore constantly urged to do things that we cannot do in the health field and do not want to do. In the third place, we have a professional relationship both to the social work group and to the medical professional group, in which connection we constantly strive to have the counsel of the best available people in both fields.

Dr. B. Franklin Royer, Medical Director, National Commission for Prevention of Blindness, New York: I think a little of the trouble existing at times between the medical profession and some of the lay organizations develops because physicians have been so busy preparing themselves for the job of curative medicine that they have failed to keep up with the trend of modern prevention. As medical men they have undertaken to teach the public with altogether too little health knowledge. I think that has resulted in misunderstanding. I am sure that meetings such as this will enable both sides to get a better point of view, and if it does nothing more than to make the medical profession see its own weaknesses and its own backwardness at times in engaging in the real field of health promotion, it will have done a great deal.

Dr. Clifford G. Grulee, American Child Health Association, Chicago: It seems to me that most of our difficulties have been difficulties of misunderstanding, but there have been some difficulties that have been real. One of the difficulties that has been real has been the failure to distinguish between curative medicine and preventive medicine. The people at large, the laity, feel that they should have public health work free. The physician feels that they should not have curative work free, and unless we can distinguish between the two there will always be that disagreement between the medical profession and the laity. That is one of the practical questions that we must settle.

Dr. Herman N. Bundesen, Health Commissioner, Chicago: It has been well said that a wood shaving has two sides; it couldn't be a shaving if it did not have two sides. I think that the way to look at many of the problems of the health official. There isn't any doubt that the solution of a problem depends largely on the personal equation of the men who happen to be in charge of organizations that may be having misunderstandings with one another. In Chicago, when I became health commissioner, Dr. Ferguson, president of the Chicago Medical Society, came into the office and pointed out to me what appeared to be several justifiable complaints. They were corrected, and we have had fine cooperation with the Chicago Medical Society and magnificent cooperation with the American Medical Association. We feel that in the Chicago Department of Health problems can be solved if both parties will take a reasonable attitude and agree that there are two sides to every story.

Dr. W. F. King, Secretary, Indiana State Board of Health, Indianapolis: Indiana has as much cooperation between the organized medical profession and the official health departments as can be found anywhere. One of our great difficulties, however, is to be found in the fact that many physicians are not members of the county and state societies. There are 4,100 physicians in Indiana, of whom less than 2,800 are members of the state medical association. We find it difficult to get the cooperation of the physicians of a community, either through the medical society or outside the medical society, because of this situation. If we can have an inclusive medical profession with all physicians as members of the organization, it should be possible for the medical profession to extend its circle of influence to take in the public health officer or public health administrator and those who are responsible for the direction of nonofficial health organizations, and that all can then work together with full understanding and confidence. I hope that the fine spirit of this meeting can be carried down to the local medical society and through the society to the local community.

Dr. D. B. Armstrong, Metropolitan Life Insurance Company, New York: I hope that before we get through we may have some opportunity to take up the relation of the individual physician to public health, and especially personal hygiene. This involves, of course, the transmission of information to people about how to live, and that is partly a job of the practicing physician. It should enable the average citizen to know the difference between the qualified practitioner of medicine and the chiropractor. It should help the average newspaper reader to know the difference between an editorial or article on smallpox sent out by Dr. Greenburg's organization, that is the American Association for Medical Progress, and an article or editorial on the same subject in McFadden's *Daily Graphic*. Then, of course, there is the question of getting the physician willing and able to meet the demands that a better informed public is going to make on him. There are still a good many physicians not yet willing and able to practice preventive medicine. For instance, we have hundreds of letters every month in the office with which I am associated asking about health examinations. The writers state that they have been advised to go to the doctor for a health examination. They complain that the doctor examined only part of them, or didn't do the job thoroughly, or gave them little really helpful advice about the hygiene of daily living. To a greater and greater extent the private citizen is being taught to seek health advice from the doctor. What agencies should guide him and by what means? He is trying to find the doctor in this field. Will he find him wanting?

Dr. William Allen Pusey, Chicago: Nobody can enjoy his prejudice after he gets on intimate terms with a man against whom it is directed. There is undoubtedly some room for better understanding between our profession and what we, with no intention of superiority, call the lay groups. I have had occasion to deal very frequently with lay organizations that have to do with health and I am ready to testify that, with rare exceptions, these experiences have been exceedingly pleasant. The workers are enlightened, intelligent. They are quite as well informed on their side of these problems as we are on ours; and they are very helpful. But it must be faced that sometimes this story is not so pleasant. I recall that at the present time Chicago medicine is suffering a grievous wrong in what, in my opinion, is an unwise adventure of a lay group in medical matters. This is partly due to the medical profession because we did not get before them, in the way that we should, all of the factors of the situation. These occasions do occur and it is highly desirable that the profession and organizations engaged in medical and physical

welfare work should try to see things from each other's standpoints and guide their courses in the light of expert information on all sides.

There was one expression that was occasionally used this morning that I often hear and which I think carries a bad impression to the man who doesn't understand; that, is the reference to the "rights" of the medical profession. Of course the medical profession has no rights at all in the sick; sick people are not made for our benefit. We are an expensive necessity, maintained for them. But in one sense medical men are entitled to certain privileges that are important to cultivate and they rest on the fact that, competent or incompetent, the medical profession represents all that society has for the treatment of the sick and injured. If a foundation or health organization goes into a community to help in health work or in the treatment of the sick, as it sometimes does, and pursues a course that is fundamentally opposed to the welfare of the medical profession, it is a socially bad act, an act that is bad not primarily because it is bad for the profession but because, being bad for the profession, it is bad for the community. For it is to the interest of the community to have the best physicians it can get, and if in a proper sense the physicians' interests are not protected the community cannot expect to have the best physicians that are available. It is necessary that medical men live; they will likely be on the ground after the organization goes away, and the organization is dependent on them for its detail work. With all our altruism most of us have families and we have to eat, and until we become endowed or taken over by the state—both of which contingencies, God forbid—we shall have to make a living.

DR. RACHELLE S. YARROS, Associate Professor of Social Hygiene, University of Illinois College of Medicine, Chicago: I have lived in Chicago and practiced medicine for thirty years. I have worked with almost every agency that has begun to do health work, and I think the people of Chicago, the enlightened people of Chicago, are always ready to be guided by the physicians. But, as Dr. William Allen Pusey said, some of the leading men and women in the profession have been too busy doing good medicine. Consequently, they have not taught the lay public as much as they should have. The public is ready for education in social hygiene and venereal disease. Right in the city of Chicago there is less cooperation with the social hygiene work of the lay group than in any other direction, and we appeal to the physicians not to isolate themselves into a separate clique. The public needs them, and they need the public.

PROF. IRA V. HISCOCK, John Hancock Mutual Life Insurance Company, New Haven, Conn.: There is just one aspect of this problem which may seem somewhat afield from the discussions so far, although it has been mentioned by Dr. Harper, and also by the President in his talk this morning. The point I should like to make relates to medical education, because the relation of the physician to this public health movement in the future will undoubtedly be influenced a great deal by the type of education that is given in the medical schools. One thing which has impressed me very much is the possibility, referred to in the publications of the American Medical Association and in other places, of starting the public health education of the men who are going to be the practicing physicians in the very early years of their course in the medical school. If these men are given a glimpse of what preventive medicine means in the early years of their course, in pediatrics, in pathology and in medicine, when they come to the courses in the principles of public health they are going to have an entirely different attitude than they would have otherwise. Furthermore, they are going to have a different attitude toward the problem as a whole out in the community. We have found that it means a great deal to the students in the principles of public health course in the medical school, if they do get an insight into the whole problem through the other courses which are not exactly labeled public health.

MR. HOMER FOLKS, State Charities Association, New York: I want to get on the record another important phase of cooperation between the state medical society and the lay health organization of New York State. Six years ago a chiropractic bill passed the legislature and got up to the governor, and there was an imminent probability it would become a law. At the suggestion of the state medical society and the state health department, the lay organization organized the lay forces of the state to defeat the bill, and the counties of the state were practically all represented in a hearing before the governor and were working actively against the bill. Through this union of effort the bill was vetoed. Since then, for six years, they have been held absolutely a unit in opposition to chiropractic and all similar legislation. Last year an important medical practice act was introduced, framed by the state medical society. They said they would like us to help; we were delighted to do it. We organized every county in the state. There was a big educational movement among the lay people as to what a medical practice act should be, and for the first time in more than a decade a really good medical practice act became a law in New York State.

DR. HARLOW BROOKS, New York: I want to point out what seems to be the great lesson of the talk this afternoon. Where people get together to talk these things over face to face, as Commissioner Kingsbury and members of our medical board did a few years ago, a mutual respect and a cooperative understanding is sure to come forth. I think it is well to know where we stand and to know the reactions of the profession to lay activities in public health matters. I think I have tried to portray this in a rather definite and thoroughly frank way with some result, apparently. The thing to do is to get together.

(To be continued)

Medical News

(PHYSICIANS WILL CONFER A FAVOR BY SENDING FOR THIS DEPARTMENT ITEMS OF NEWS OF MORE OR LESS GENERAL INTEREST: SUCH AS RELATE TO SOCIETY ACTIVITIES, NEW HOSPITALS, EDUCATION, PUBLIC HEALTH, ETC.)

CALIFORNIA

Institute on Public Health.—The first annual institute on public health, under the auspices of the Los Angeles County Public Health Association and the advisory board of the county health department, opened, June 20, at Los Angeles, and will end, July 9. It was made possible through the financial assistance of four members of the staff of the county health department and the county public health association with the hope that the standard of local health activities will be raised. The principal speaker was Charles-Edward A. Winslow, Dr.P.H., Anna M. R. Lauder professor of public health, Yale University School of Medicine, New Haven. Instruction was arranged under two heads: (1) a technical course given during the morning hours for physicians and other health workers, and (2) a popular course of six lectures in the evening given in the auditorium at Patriotic Hall, 1816 South Figueroa Street.

CONNECTICUT

State Medical Election.—At the annual meeting of the Connecticut State Medical Society, Hartford, May 25-26, Dr. Daniel Sullivan, New London, was elected president; Drs. Frank W. Stevens, Bridgeport, and Warren Avery Tanner, Danielson, vice presidents; Dr. Charles W. Comfort, Jr., New Haven, secretary, and Dr. Phineas H. Ingalls, Hartford, treasurer. The next meeting will be held, May 23-24, 1923, at Bridgeport.

Appointments at Yale.—The appointment of Dr. Grover F. Powers as professor of pediatrics at Yale University School of Medicine was announced, June 16. Dr. Powers is a graduate of Purdue University and Johns Hopkins University School of Medicine, where he was an instructor and associate in clinical pediatrics, and physician-in-charge of the pediatrics dispensary from 1916 to 1921. He then joined the faculty of Yale University School of Medicine as assistant professor of pediatrics. The following instructors have been appointed at Yale: Dr. Thomas Francis, Jr., medicine; Dr. Francis B. Carter, obstetrics and gynecology; Dr. Sigurd C. Sandzen, surgery, and Dr. Robert Salinger, pediatrics.

Diploma Mill Echoes—Koutsompous and Professor Scotellaro.—Testimony at rehearings in Hartford of the eleven eclectic physicians whose licenses had been revoked, noted in THE JOURNAL, June 25, indicated that all the honorary degrees issued by the Kansas City College of Physicians and Surgeons had been paid for except one issued to William Koutsompous of St. Louis, whose Connecticut license was revoked in 1924 on request of the Connecticut Eclectic Medical Examining Board. Ralph L. White, New Canaan, a member of the former Connecticut Eclectic Examining Board, is said to have testified that he was given a diploma from this school but that he destroyed it because he did nothing for the school either in service or money. James E. Hair, secretary of the eclectic examining board, testified that he also received a diploma during a casual Sunday stopover in Kansas City. Frederick A. Waite, Ph.D., Cleveland, Ohio, formerly special investigator for the Missouri state board, testified that Waldo Briggs, dean, St. Louis College of Physicians and Surgeons, appointed Nicholas Scotellaro a professor in the physiology department, and considered him qualified to teach, although it appears that Scotellaro failed in his premedical examinations at Fordham University, and also in the first year examinations at the College of Physicians and Surgeons of Baltimore, passing these on reexamination and passing the second year examination on a retrial; he failed twice in the third year examinations and was dismissed, going then to the St. Louis College of Physicians and Surgeons where Dean Briggs examined and passed him with all conditions removed; he graduated there in June. Robert Adcox, who was sentenced to prison as a result of his connections with diploma mills but never served, and Harry T. Brundidge, reporter for the St. Louis *Star*, whose investigation for that paper led in large part to the investigations carried on by state authorities in Connecticut and Missouri, were among the other witnesses for the state. Much of their information was published in THE JOURNAL at the time of the diploma mill investigation.

GEORGIA

Dr. Hardman Inaugurated as Governor.—Dr. Lamartine G. Hardman of Commerce was inaugurated, June 25, as the fifty-sixth governor of Georgia. Dr. Hardman practiced medicine in the state for many years, retiring about 1919 to engage in the business and industrial life of his community and the state. He is the first physician to become governor of Georgia (THE JOURNAL, Oct. 23, 1926).

Renovation of Medical Building.—The departments of the University of Georgia Medical Department, Augusta, that were affected by the recent school fire are being renovated; the roof, the only part that burned, is being restored. The damage was estimated at $16,000. Space in the south wing, heretofore unused, is being converted into quarters for the department of experimental surgery with a large operating room, three rooms for research and an office. The space formerly used by the surgical department on the first floor will be taken taken over by the department of public health. The medical department is appealing to the legislature now in session for an increased appropriation of $20,000 a year for maintenance to replace a similar amount that has been received for the last five years from the Carnegie and Rockefeller foundations, which contract has expired. The public spirited citizens of the community and "official Augusta" contributed a similar amount to that given by the foundations, and these funds were used chiefly to inaugurate full-time departments in medicine, surgery and obstetrics.

Students Establish Loan Fund from "Breakage Fees."—The class of 1927 of the Medical Department of the University of Georgia has established a loan fund for needy students by turning back to the school the unused portion of money deposited as "breakage fees." The fund will be added to yearly until fifteen graduating classes have contributed to the fund, when the student council or faculty committee may apply further deposits to the advancement and expansion of the medical department. Former graduates shall be given the privilege of contributing to the fund as well as other persons. Loans shall be limited to needy students recommended by the student council and by a committee of two members from each class and approved by a faculty committee. The attitude, moral character and financial status shall determine the eligibility of students desiring loans. The precedent for establishing this fund was set by Dr. James R. Howell of the class of 1926, who, in conjunction with all the members of the class of 1927, signed a fitting set of resolutions to the students of the medical department of the university.

ILLINOIS

Society News.—Dr. Dana B. Seger, Morrison, was guest of honor at a dinner at the Morrison Country Club, June 16, given by the Whiteside County Medical Society in celebration of his fiftieth year in the practice of medicine. The president, Dr. Charles E. Parker, spoke on "Early History and Practitioners of Whiteside County," among other speakers was Dr. John E. Tuite, Rockford, president-elect of the state medical society.——Dr. Maurice L. Blatt, associate professor of pediatrics, University of Illinois College of Medicine, Chicago, addressed the Rock Island County Medical Society, Moline, June 14, on "Infant Feeding."

Chicago

Chiropractor Breaks Patient's Back.—George E. Ingram, an unlicensed chiropractor, was arraigned in municipal court, June 21, to answer, it is reported, his own charge of breaking the back of a patient under treatment. Ingram is said to have gone to the office of the state board of registration and education and reported that he had injured the patient. He was granted a jury trial, and as he was unable to furnish bond was placed in jail. Ingram came to Chicago recently from Oklahoma.

Society News.—Dr. Charles Davison, emeritus professor of surgery, University of Illinois College of Medicine, Chicago, gave the commencement address at the University of South Dakota, Vermilion, June 6, on "Prevention of Disease."—— At the annual election of officers of the Chicago Medical Society, June 13, Dr. Frank R. Morton was elected president-elect and Dr. James H. Hutton, secretary. The president of the society for the ensuing year is Dr. Isaac A. Abt.——A request from the Chicago Field Health Officers' Association to have the affiliation with the Chicago Medical Society changed to the present name of the organization, Chicago District Diagnosticians' Association, was disapproved at the June 14 meeting of the council of the Chicago Medical Society.

Progress in Physiology Department.—Since the establishment of the physiology department of the University of Chicago, 108 students have been granted masters' degree in

physiology, in most cases only after the completion of a piece of research constituting actual contribution to knowledge and published in a scientific journal. Fifty-five students have been granted the degree of doctor of philosophy (thirteen under the chairmanship of Professor Loeb, two under the chairmanship of Professor Stewart, and forty under the chairmanship of Professor Carlson); of these fifty-five doctors of philosophy, five are in the practice of medicine, four are professors of medicine; two professors of pharmacology, one a profesor of biology, one a professor of milk production and one an instructor in English; several are professors and instructors in physiology in twenty-eight universities in the United States and Canada; one is in charge of a missionary hospital at Korea, one is in the Peking Union Medical College, China, and four are dead. Eleven of the graduates of this department are at present in the University of Chicago; one in the department of pharmacology, one in the department of surgery, four in the department of medicine and five in the department of physiology. A total of 607 papers and seven books had been published from the department up to June 30, 1926. The department, now established in the new building represented here north of the Albert Billings Memorial Hospital, was open to the public, June 11, at which time scientific demonstrations were given by the staff.

INDIANA

Personal.—Dr. Elmo Ray Royer has been appointed medical director of Milan Springs Hotel, Milan; Dr. Royer was formerly assistant director of the new Highland Sanatorium in Martinsville.

Dr. King Reelected.—At a meeting of the state board of health, June 14, Indianapolis, Dr. William F. King was reelected secretary of the board; Dr. James A. Turner, Ladoga, was elected president of the board at this meeting, and Dr. Amos J. Hostetler, Lagrange, vice president.

New Buildings at State Medical School.—Three new units are under construction or planned for the Indiana University School of Medicine, Indianapolis. The William H. Coleman Hospital for Women will be opened in October for patients from all parts of the state either as charitable, part-pay or pay patients. The hospital, donated by Mr. and Mrs. William H. Coleman in memory of their daughter, will cost $350,000 and accommodate seventy-five patients mostly in private rooms. It is red brick and Bedford stone and almost entirely fire-proof with sound-proof walls. A state appropriation of $75,000 a year will be available for maintenance. The medical school unit under construction was started in 1917 but not finished on account of the World War. Funds to complete the structure have been provided by the sale of the old medical school building at Market Street and Senate Avenue to the state for $100,000. The legislature has appropriated $50,000 for equipment. It will conform in style to the present building to which it will be an addition facing Michigan Street. There will be an auditorium seating 500, additional classrooms and laboratories and room to expand the library, for which the last legislature appropriated $20,000 a year for two years for new books. The medical building can accommodate 100 students in each of the three classes, the first year continuing to be taught at Bloomington. The enrolment at the medical school at Indianapolis is about 280. The third building to be erected is a $500,000 nurses' home and training school, a gift of the Ball Brothers of Muncie, to be constructed soon, a little northwest of the Coleman Hospital and southwest of the Riley Hospital. It will be fire-proof, of English Georgian architecture, and connected by tunnel with other medical units, and will accommodate 165 nurses.

William H. Coleman Hospital for Women

New medical school unit

MAINE

State Medical Election.—At the annual meeting of the Maine Medical Association, Portland, June 15, Dr. Herbert F. Twitchell was installed as president; Dr. Frank Y. Gilbert, Portland, was made president-elect. The next meeting will be in Belgrade in June, 1928. A woman's auxiliary was organized during this meeting, and Mrs. Frank Y. Gilbert was elected president.

MASSACHUSETTS

Olives Condemned.—The health department of the city of Boston in its May bulletin notes that large quantities of unwholesome olives have been discovered in the routine examinations of food in Boston. The olives came from Sicily in 300 barrel lots, and on examination were found to be from 15 to 40 per cent wormy; at the time of writing the department had condemned about 1,200 pounds of them.

Personal.—Dr. James S. Stone, Boston, president of the Massachusetts Medical Society, recently addressed the Alabama State Medical Society on "Some Lesions of Bones and Joints in Children."——Dr. Robert C. Stickney tendered his resignation as member of the board of health of Beverley, April 25.——Dr. Charles J. White has resigned as Edward Wigglesworth professor of dermatology at the Medical School of Harvard University, effective September 1, when he will become emeritus professor.

Dr. Wilinsky to Assist in Health Survey of Palestine.—The international commission in charge of a project to survey and study the health of Palestine under the direction of Dr. Milton J. Rosenau of Harvard University Medical School has selected Dr. Charles F. Wilinsky, deputy commissioner of health of Boston, to assist in the survey. Dr. Wilinsky, who has been granted a leave of absence by the city for this purpose, left Boston, May 12, to sail from New York. Since 1916, Dr. Wilinsky has been in charge of the health unit work of Boston, and his appointment is considered by the local health department a recognition of his work on disease prevention.

MINNESOTA

University News.—All students at the University of Minnesota will be given free medical examinations beginning in the fall; at the commencement, June 13, the degree of master of science in surgery was given to Drs. Gilbert C. Anderson, Paul G. Flothow, Norman C. Ochsenhirt and William W. Sager, fellows of the Mayo Foundation. Other fellows receiving advanced degrees were Drs. Herbert V. Dobson and Louis E. Prickman, masters of science in medicine; Dr. Harold D. Caylor, master of science in pathology, and Dr. Dewey R. Heetderks, master of science in otolaryngology. The degree of Ph.D. in surgery was conferred on Dr. Winfred H. Bueermann, now of Portland, Ore., in absentia.

MISSISSIPPI

Ex-Presidents' Club Organized.—During the annual meeting of the Mississippi State Medical Association, the Ex-Presidents' Club was organized with Dr. Peter W. Rowland, chairman, and Dr. Dudley Jones, secretary; eighteen of the twenty-four living ex-presidents of the state society were present. The oldest member is to be chairman of the club automatically, and the active president of the state medical society is to be the annual guest of honor. The object of the club is to promote good fellowship and encourage attendance at the state meeting. There are to be "no dues and no politics."

Society News.—Among others, Dr. Ewing F. Howard addressed the Isaquena-Sharkey-Warren County Medical Society, Vicksburg, June 14, on "Medical Ethics."——At the June 7 meeting of the South Mississippi Medical Society, Hattiesburg, Dr. Wiley D. Forbus, Johns Hopkins Hospital, Baltimore, was guest of honor. Alumni of the South Mississippi Infirmary served a dinner during the meeting, the proceeds of which were donated to a nurse suffering from pulmonary tuberculosis.——Dr. Waller S. Leathers of Vanderbilt University School of Medicine, Nashville, Tenn., addressed the Social Workers Conference at the University of Mississippi, June 23, on "Health Problems and Health Work in the South."——Among others, Dr. Charles M. Coker, Eden, addressed the Central Medical Society, Jackson, May 24, on "Why Doctors Don't Locate in the Country," and Dr. Orrin H. Swayze, Yazoo City, on "Acute Dilatation of the Stomach Following Operations."

MISSOURI

Hospital for Crippled Children Opens.—The state hospital for crippled children at Columbia will begin receiving patients, July 11. The requirements for committing children to the hospital are that the county court appoint a physician to examine the children and make a written report stating whether the condition found can probably be relieved, and that the parents are unable to provide means for suitable treatment. When such certificate has been filed, the court will conduct a hearing to which the parents will be summoned, and if it is found that the preliminary legal requirements have been fulfilled, will order the children to the hospital. The physician is allowed a fee of $5 for the examination of the child and the execution of the certificate to be filed with the court. Dr. Frederick A. Jostes, St. Louis, has been appointed full-time director of the service for crippled children at the state university hospital. Dr. Jostes is at present on the orthopedic staff of the Washington University Medical School, and formerly was on the staff of the Shriners' Hospital for Crippled Children at St. Louis. He has done postgraduate orthopedic work in this country and abroad. The legislature has appropriated $35,000 for the care of crippled children at the hospital during the next eighteen months, and the appeal of this work to the public probably will result in donations by private citizens. Already Mr. J. Dozier Stone of Columbia has informed the board of curators that he will provide funds for establishing a dental clinic

in memory of his father and mother. Inquiries in connection with this new service will be received by Dr. Guy L. Noyes, dean of the University of Missouri School of Medicine, Columbia.

NEW YORK

Meharry Medical College Recognized.—Meharry Medical College, Nashville, Tenn., has been granted recognition by the New York Board of Regents, it is reported. Meharry Medical College has been rated in Class A by the Council on Medical Education and Hospitals of the American Medical Association since January, 1923.

Society News.—Dr. Joseph Ivimey Dowling has been elected president of the Eastern Eye, Ear, Nose and Throat Association, which comprises specialists from Albany, Schenectady, Troy, Glen Falls, Amsterdam, Gloversville and Rutland, Vt. Dr. Morris S. Lord was elected vice president, and Dr. L. Prescott Brown, secretary-treasurer.

Hospital News.—The Williamsburg Hospital and the Brooklyn Eye and Ear Hospital will merge about July 1, and will be known as the Brooklyn Eye and Ear Hospital. The present home of the Williamsburg Hospital will be sold, and it is proposed to use the funds to assist in the construction of a new building at Green Avenue and Cumberland Street, Brooklyn.

Erie County Picnic.—The Medical Society of the County of Erie held its annual basket picnic, June 23, on the state hospital grounds near Gowanda. Physicians in the entire part of western New York, their wives and children were invited. The medical superintendent of the hospital, Dr. Earle V. Gray, assisted with the arrangements, placing tennis courts, a golf course, fishing ponds, bowling greens and a baseball diamond at the disposal of the guests. The scientific program was a demonstration of the results of the treatment of general paralysis by malaria; an outline of the method of committing a patient to the state hospital, and an exhibition of the occupational therapy and physical therapy departments of the hospital.

New York City

Society News.—Dr. John J. Masterson was elected president of the Medical Society of Bay Ridge, June 14.——The Medical Society of the County of Kings has acquired the four story building at the corner of Atlantic Avenue which adjoins its present building on Bedford Avenue, paying, it is reported, $95,000; the society now owns property facing 100 feet on both avenues.

Physicians' Golfing Association.—The first tournament of the Physicians' Golfing Association was held at the Rye Country Club, June 10. Dr. Frank C. Carr won the low gross prize with a score of 83, and Dr. John G. W. Greeff the low net prize with a score of 71. The officers are Dr. Wendell C. Phillips, honorary president; Dr. Anthony Bassler, president, and Dr. Harold M. Hays, secretary-treasurer. There will be four tournaments a year. The membership is composed of physicians practicing in Manhattan who are members of clubs in the metropolitan district.

Personal.—Dr. Isador W. Kahn has been appointed assistant professor of gynecology at the New York Post-Graduate Medical School and Hospital.——Dr. Joseph H. Gettinger was guest of honor at a dinner, June 17, at the Concourse Plaza Hotel, to celebrate his promotion to visiting physician to the pediatric service in the Bronx Hospital.——Dr. Alexis Carrel of the Rockefeller Institute for Medical Research has been elected a corresponding member of the French Academy of Sciences.——Dr. Emil Mayer was elected to honorary membership in the American Rhinological, Laryngological and Otological Society at the recent annual meeting in Atlantic City.

Clinics for Treatment of Thrombo-Angiitis Obliterans.—At a meeting of the Committee on Thrombo-Angiitis Obliterans, June 16, it was decided to establish clinics in various sections of the country for the treatment of thrombo-angiitis obliterans. The following hospitals in New York have arranged to establish clinics: Polyclinic Hospital, Monday, Wednesday and Friday, 10 to 11 a. m.; Hospital for the Ruptured and Crippled, daily, 3:30 to 5 p. m.; Orthopedic Clinic, New York University and Bellevue Hospital Medical College, Monday, Wednesday and Friday, 3 p. m. A unified chart is being prepared that will facilitate keeping the history and records of these cases and make it possible to check the methods of treatment proposed. The charts will be furnished to any physician or hospital wishing to cooperate in this study on request to Dr. Benjamin Jablons, secretary of the committee, 90 East Riverside Drive. Dr. Reginald H. Sayre was elected chairman of the committee at this meeting, and Dr. Charlton Wallace, treasurer.

Purchase of Rare Medical Library.—The faculty and alumni of Columbia University College of Physicians and Surgeons are raising a fund of $35,000 to obtain the collection of rare medical books that belonged to the late Dr. George S. Huntington, an alumnus of the medical school and for many years the professor of physiology. The library is to be presented to the medical center now under construction at Broadway and One Hundred and Sixty-Eighth Street, where it will be available to the profession and will be known as the George S. Huntington Memorial Library. Many of these books and manuscripts have no duplicates. Among the 4,424 volumes are 780 published prior to the year 1800, and 550 volumes published between 1800 and 1850. This is the first time the faculty and alumni of the school have been requested to contribute to the new medical center, and the fund raised will be turned over to Dr. Huntington's estate. The memorial committee includes Dr. Frederick Tilney, professor of neurology; Dr. William Darrach, dean of the medical school, and Dr. Samuel W. Lambert, president, New York Academy of Medicine.

OHIO

Board of Trustees Commended.—The house of delegates of the Ohio State Medical Association, at the recent Columbus meeting, adopted a resolution commending the board of trustees of the American Medical Association and the special committee on physical therapy for their effort to clarify, evaluate and standardize the present problems in respect to physical therapy.

Society News.—Dr. Vilray P. Blair, St. Louis, addressed the Toledo Academy of Medicine, June 3, on "Surgical Repair of Congenital and Acquired Defects of the Face," and Dr. Chester W. Waggoner, Toledo, on "Medical Economics"; eight members of the academy were requested to talk on medical subjects before the Woodward High School, June 2-3. This was the first assignment under the new speakers' bureau.

Dr. Cummer Resigns.—Dr. Clyde L. Cummer, associate professor of clinical pathology, Western Reserve University School of Medicine, Cleveland, has resigned after nineteen years' service at the university. Dr. Cummer has engaged in the practice of medicine since 1908, and is the author of a manual on clinical laboratory methods. He was president of the Cleveland Medical Library Association in 1923 and for several years the treasurer.

Unlicensed Healers Arrested.—The Ohio State Medical Board caused the arrest in April of three alleged psychic healers on charges of practicing medicine without a license. They were John Wolf, Mrs. Mildred Morrison and Mrs. Carrie Corp, all of Columbus. Wolf and Mrs. Morrison are alleged to have treated Frank A. Dorsey, one of the board's investigators. They were each fined $200 by Judge Miller and sentenced to sixty and thirty days in the workhouse, respectively. Mrs. Corp, C. J. Wohlgumuth and C. W. Ferguson were each fined $100 and costs for practicing medicine without a license. J. T. Armstrong, Wellsville, was fined $25 and costs, and E. W. Sherwood, D. O. Watts and H. B. Whitesel, Bowling Green, were also fined in January for illegal practice.

TENNESSEE

Personal.—Dr. James K. P. Blackburn, Pulaski, has been appointed a member of the state board of medical examiners to succeed Dr. Fountain B. Hulme.——A. E. Godwin has resigned as assistant secretary of the Vanderbilt University School of Medicine, Nashville, it is reported.

Health at Knoxville.—Telegraphic reports from sixty-seven cities with a total population of about 30 million to the U. S. Department of Commerce, for the week ending June 4, indicate that the highest mortality rate (20.4) was for Knoxville. The mortality rate for the group of cities as a whole was 11.8.

Society News.—Dr. Seale Harris, Birmingham, Ala., addressed the Chattanooga and Hamilton County Medical Society, June 9, on "Dangers of State Medicine."——The Nashville Academy of Medicine and Davidson County Medical Society held five meetings during May at which, among others, Dr. Charles L. Hill read a paper on "Erysipelas"; Dr. Oval N. Bryan on "Tularemia" and Dr. George K. Carpenter on "Unusual Epiphyseal Affections."——Dr. Oliver W. Hill

addressed the Knox County Medical Society, May 24, on "Observations on the After Effects of Intracraneal Hemorrhage in the New-Born"; Dr. Marvin F. Haygood addressed the society, May 17, on "Study and Comparison of Knoxville's Typhoid Prevalence During the Last Twenty Years."——The Lauderdale County Medical Society, May 5, was the guest of the physicians of Ripley at the Jefferson Davis Hotel at a dinner.——Dr. Ambrose L. Jones, Greenback, addressed the Blount County Medical Society, recently, on "Treatment of Bronchopneumonia."——Dr. Horton R. Casparis, professor of pediatrics, Vanderbilt University School of Medicine, Nashville, addressed the May meeting of the Williamson County Medical Society on "Early Diagnosis of Tuberculosis in Children."——The medical societies of Monroe, Luden and Roane counties will hold joint meetings during June, July and August.

VIRGINIA

Personal.—Dr. Fred J. Wampler, who recently returned from China, has been appointed health officer for Accomac and Northampton counties, succeeding Dr. Robert P. Cooke, who is now in charge of similar work in Lexington and Rockbridge counties.——Dr. Edith J. Lacy has resigned as assistant physician at the Eastern State Hospital, Williamsburg; the *Virginia Medical Monthly* states that Dr. Lacy expects to go to India for medical service.

University News.—At the commencement of the Medical College of Virginia, Richmond, May 31, eighty-nine graduates received degrees of doctor of medicine; thirty-two were commissioned in the Medical Officers Reserve Corps, U. S. Army. The commencement address was delivered by Dr. Hugh S. Cumming, Surgeon General, U. S. Public Health Service, on "Relation of the Physician to the Public." Dr. Cumming is a graduate of the University of Virginia Department of Medicine, Charlottesville, and of the Medical College of Virginia; he was awarded the honorary degree of doctor of science at this commencement, the first nonprofessional degree to be awarded by the college.

Society News.—The annual meeting of the Walter Reed Medical Society of Virginia was held, May 26-27, Yorktown, under the presidency of Drs. John W. C. Jones, Newport News. The speakers from other states included Drs. John T. King, Jr., Baltimore, "Bedside Aspects of Cardiac Arrhythmias"; Charles R. Austrian, Baltimore, "Early Diagnosis of Pulmonary Tuberculosis"; Emil Novak, Baltimore, "Newer Aspects of Endocrinology and Organotherapy in Gynecology"; Guy L. Hunner, Baltimore, "Ureteral Strictures"; Howard Root, Brookline, Mass.; "Diabetic Problems in Practice"; William B. MacNider, Chapel Hill, N. C., "A Study of Chronic Nephritis"; James F. Mitchell, Washington, D. C., "Treatment of Some Common Infections," and Edwin A. Merritt, "Value of the Graham Technic in Study of Gallbladder Disease." Dr. William W. Kerns, Bloxom, is the new president of the society; Dr. Landon E. Stubbs, secretary, and Dr. James E. Marable, treasurer, both of Newport News.——The Augusta County Medical Society made a donation, May 4, of $100 for the relief of flood sufferers in the Mississippi Valley.——The Walter Reed Medical Society at its annual meeting in Yorktown, May 26-27, appropriated $100 to the Walter Reed Memorial Fund.——The Russell County Medical Society has been reorganized after a period of inactivity, and Dr. Thomas T. McNeer, Dante, was elected president.——Dr. Charles S. Dodd, Petersburg, was elected president of the Virginia Society of Otolaryngology and Ophthalmology at the recent annual meeting; it was decided at this time to award a prize every year for the best paper presented by a member of the society.

WASHINGTON

Hospital News.—The Minor Hospital, Seattle, has announced plans to construct a $600,000 addition.——Dr. Robert J. Kearns, Spokane, has been elected president of the staff of Sacred Heart Hospital.

Personal.—Dr. Charles L. Dixon, Renton, has been appointed health officer of King County, and Dr. Nathaniel E. Roberts, Olympia, has been made health officer of Thurston County to succeed Dr. John J. O'Leary, resigned.

Society News.—Dr. Harry Gaylord Willard, Tacoma, president of the state medical association, lead another "medical caravan" to the Clallam County Medical Society, Port Angeles, May 7; among the speakers were Drs. Willard and John Warren Bell, Everett; Adolph O. Loe, Seattle, and Mr. Robert O. Jones, Seattle, secretary of the Washington Public Health League.——The Pierce County Medical Society, Spokane, voted to publish in three daily papers twice a year, thus giving one list every two months, cards showing the members of the society in good standing. The publicity committee reported at its meeting that the telephone company would not carry their publicity advertising as had been done during the last year. Dr. Joseph F. Griggs, Tacoma, addressed this meeting on "Cardiovascular Renal Disease"; the society then adjourned for the summer vacation.——The Western Branch of the American Urological Association will hold its annual meeting, July 5-7, at Portland, Seattle and Vancouver. The speakers from other sections of the country will be Bernard G. Scholefield, Boston, "Tuberculosis of the Kidney"; Dr. William H. von Lackum, Rochester, Minn., "Data on the Infected Prostate"; Dr. Harold L. Morris, Detroit, "Bilateral Renal Calculi"; Dr. Elmer Hess, Erie, "Renal Sympathectomy." The society will meet at St. Vincent's Hospital, Portland, the Medical and Dental Building, Seattle, and the Vancouver General Hospital, Vancouver.——Physicians from Skagit, Whatcom and Snohomish counties held a joint scientific meeting, golf tournamount, and banquet at the President Hotel, Mount Vernon, June 8.

WISCONSIN

Enlarged Program for Postgraduate Study.—A two year program of medical extension work at the University of Wisconsin, has been announced following a joint meeting of representatives of the state medical society, the state medical school and the extension division of the University of Wisconsin. The program has four fields of effort: (1) medical literature and case report service for individual physicians; (2) lecturers for county medical societies, the programs to be supplied without expense; (3) postgraduate courses at the university; (4) special lecture-clinical groups. About $18,000 will be expended on this work. At a subsequent meeting it was decided that the work would be offered under the joint auspices of the state medical society, the medical school and the extension division of the university. The executive committee comprises Chester D. Snell, of the extension division; Dr. Arthur W. Rogers, president of the state medical society; Dr. Charles R. Bardeen and Joseph S. Evans, of the medical school, and Mr. J. G. Crownhart, ex officio. The package library service will be enlarged and a full-time medical librarian employed. The state medical journal will publish a special section on case reports. It will be possible for every county medical society to have the services of members of the staff of the medical school and others as speakers without cost. Requests for program material should be made to Dr. Robin C. Buerki, Wisconsin General Hospital, 1300 University Avenue, Madison. Requests should be preferably on the basis of subjects desired rather than for individual lecturers. The short review courses to be offered by the university medical school will become effective in 1928 and will be in the field of remedial agencies. The lecture-clinical groups will be organized on the North Carolina Plan and become effective in 1928.

GENERAL

Changes in Cuban Journal.—*Vida Nueva*, the Havana journal founded and edited by the late Dr. D. Tamayo, formerly Cuban secretary of public health, is now edited by Drs. O. Montoro and I. Castellanos. The old policy of limiting the scope of the journal to social-medical questions has been abandoned, and instead each issue will be devoted to one important medical subject, as French journals are wont to do. The abstract department has been enlarged and systematized and the number of pages increased; the publication is, in general, more attractive. The subscription price is $5.

Society News.—Dr. John F. Barnhill, Indianapolis, was elected president of the American Laryngological, Rhinological and Otological Society at the recent annual meeting in Atlantic City, and Dr. Robert L. Loughran, 33 East Sixty-Third Street, New York, secretary.——The thirty-second annual meeting of the National Medical Association will be at Detroit, August 15-19, under the presidency of Dr. Carl G. Roberts, Chicago; although many social features have been arranged, the journal of this association states that the dominant note will be "professional progress." All of Wednesday will be devoted to clinics and demonstrations in all the sections.

Renewal of Permits Under National Prohibition Act.—Physicians holding permits under the National Prohibition Act entitling them to prescribe and use intoxicating liquor who desire to retain those privileges during 1928 must file renewal

applications on or after July 1, but not later than August 31. Application should be filed with the prohibition administrator having jurisdiction over the district in which the physician practices. For good cause shown, the prohibition administrator may grant an extension of time for filing application, but the granting of such an extension is entirely discretionary with that official, and in no case may the time limit be extended beyond November 30. Physicians failing to make timely application must thereafter apply as for a new permit, if permit privileges are desired. Applications should be submitted in triplicate on forms which will be supplied by the prohibition administrators.

Joint Postgraduate Conference in October.—The annual fall conference of the Kansas City Clinical Society will merge with the 1927 session of the Inter-State Post-Graduate Assembly of North America at Kansas City, October 14-22; this will be the fifth year that the Kansas City Clinical Society has provided a clinical conference, and will conclude its fifth year program to develop the educational advantages of clinical material in Kansas City. The joint session in October will bring together at least eighty clinicians from various countries to hold clinics in the specialties, to present symposiums and to give addresses and demonstrations. The joint meeting will be at the Ararat Shrine Temple, Eleventh and Central streets, Kansas City, Mo. The entertainment program will include alumni dinners, smokers, receptions, automobile drives and a banquet to the guests. The general chairman of the Kansas City Southwest Clinical Society is Dr. E. H. Skinner, 631 Rialto Building, Kansas City, Mo.

"Drinking" Now Adulterates Oysters—Former Decision Repealed.—The department of agriculture has repealed a decision which was issued in 1910. The former decision held that it was not illegal to drink oysters in waters of saline content equal to that in which the oysters will grow to maturity, and that oysters floated in water of less saline content than that in which they will properly mature cannot be considered adulterated if the packages containing them are clearly labeled "floating oysters." The department holds now that the floating or drinking of oysters, as practiced under the former decision, has the effect of adulterating them with water, and the interstate shipment of oysters so adulterated constitutes a violation, even though they are labeled "floating oysters." The department will, therefore, proceed, under the terms of the Food and Drugs Act, against all shipments of oysters whether shucked or in the shell which have been adulterated by floating or other means.

FOREIGN

International Conference on Goiter at Berne.—Under the auspices of the Swiss Goiter Committee, an international conference on goiter will be held in the aula of the university building in Berne, Switzerland, August 24-26. The president of the conference, Dr. H. Carrière, will give the opening address on the general distribution of goiter, and among other speakers will be Prof. L. Aschoff, Freiburg; Dr. David Marine, New York; Professor de Quervain, Berne; Dr. McCarrison, Cooroon, India; Professor Galli-Valerio, Lausanne, and Prof. Wagner von Jauregg, Vienna. The assembly will be welcomed by the officials of the canton and the city of Berne. There will be a demonstration in the surgical clinic by Prof. F. de Querin, August 27, and in the afternoon a trip to the poor farm with a demonstration of cretins. The conference was first planned by the Swiss Goiter Committee in 1923, and had to be postponed until this year.

Postgraduate Courses in Berlin.—The association of professors, in collaboration with the organization representing the Kaiserin Friedrich Institute and with the medical faculty of the University of Berlin, has organized international postgraduate courses in medicine to be held in Berlin. There will be continuous courses extending over the greater part of the year, and courses held only from September 15 to October 31. The two types of continuous courses are (1) individual courses in all branches of medicine, with opportunities for practice, usually covering four week periods, and (2) so-called externships in clinics, hospitals and laboratories, chiefly intended for medical men seeking practice as assistants for longer periods. The short courses are general courses in all branches of internal medicine, with emphasis on therapy. There will also be short courses for nose, ear and throat specialists. The medium of instruction is German, although many teachers are able to instruct in English, French or Spanish. Further information may be obtained by addressing Kaiserin Friedrich Stiftung, Kaiserin Friedrich Haus, 2-4, Luisenplatz, Berlin, NW 6.

Government Services

U. S. Public Health Service

Surgs. Joseph W. Mountin, Jefferson City, Mo., Knox E. Miller, New Orleans, and Asst. Surg. Erval R. Coffey, Jefferson City, Mo., and Acting Asst. Surg. Winfield K. Sharp, Jr., Nashville, Tenn., and Associate Sanitary Engineer A. L. Dopmeyer, Memphis, Tenn., were recently ordered to duty to cooperate with the state and local health authorities in connection with the prevention of epidemic diseases in the flooded areas of the Mississippi Valley, and Asst. Surg. Raymond A. Vonderlehr and Surg. Randolph M. Grimm, both of New York, have been assigned to duty at the hygienic laboratory, Washington, D. C.——Surg. Peter J. Gorman has been relieved from duty at Ellis Island and directed to proceed to duty at Nogales, Ariz., assuming charge of activities there.——Surg. Joseph Goldberger was directed to proceed from Washington to Milledgeville, Ga., then to Dallas, Texas, and return in connection with pellagra studies.——Dr. Mather H. Neill has been relieved from duty at Honolulu and assigned to duty at marine hospital number 19, San Francisco.——The following officers have been ordered to duty at the stations indicated after their names: Surg. Newton E. Wayson to Honolulu to assume charge of the U. S. Leprosy Investigation Station; P. A. Surg. Ralph L. Lawrence to Washington, D. C., and report to the Surgeon General for duty. Asst. Surg. John F. G. Gates to U. S. Quarantine Station, New Orleans; Asst. Surg. George G. Holdt assigned to duty at U. S. Marine Hospital number 19, San Francisco, Calif.; Surg. Harvey G. Ebert, directed to proceed to Providence, R. I., and assume charge of service activities at that station; Surg. Herbert M. Manning, directed to proceed to Marcus Hook, Pa., to assume charge of the U. S. Quarantine Station; Surg. Harry E. Trimble assigned to duty at U. S. Marine Hospital number 7, Detroit; Asst. Surg. F. S. Fellows, assigned to duty at U. S. Quarantine Station, Rosebank, S. I., N. Y.; Surg. Marion S. Lombard, directed to proceed to Key West, Fla., and assume charge of U. S. Marine Hospital number 10; Asst. Surg. Albert T. Morrison, assigned to duty at U. S. Quarantine Station, Angel Island, Calif. The following reserve officers have been ordered to duty: Asst. Surg. Ralph Horton to U. S. Marine Hospital number 1, Baltimore; Asst. Surg. Clarence D. Kosar to Washington, D. C., and return for conference at the bureau; Asst. Surg. Fred W. Caudill, assigned to duty at U. S. Marine Hospital number 3, Buffalo Surg. C. P. Knight has been directed to proceed from the Canal Zone to Washington, D. C., to report to the Surgeon General for duty.——Surg. G. W. McCoy has been directed to proceed from Washington, D. C., to Rockford, Ill., in connection with field investigations of smallpox.

Changes in Veterans' Bureau Personnel

The May issue of the U. S. Veterans' Bureau Medical Bulletin reports the following changes in personnel:

Dr. Edward R. Anthony, Jr., resigned at Memphis, Tenn.
Dr. Clifford C. C. Brace, appointed at North Chicago.
Dr. William C. Davis, transferred from Tupper Lake, N. Y., to Fort Bayard, N. M.
Dr. John L. Donahue, reappointed at Fort Bayard, N. M.
Dr. Morris H. Goodman, transferred from Washington, D. C., to St. Cloud, Minn.
Dr. Mansell B. Holmes, appointed at North Little Rock, Ark.
Dr. John H. Kay, resigned at North Little Rock, Ark.
Dr. Claude C. Keeler, transferred from St. Paul to Fort Snelling, Minn.
Dr. David Kramer, resigned at Fort Bayard, N. M.
Dr. Louis S. London, resigned at Bronx, N. Y.
Dr. Herbert O. Matthews, appointed at Tuskegee, Ala.
Dr. Rob Roy McCully, reappointed at Rutland Heights, Mass.
Dr. Frank W. Schwarz, transferred from Legion, Texas, to Perry Point, Md.
Dr. George M. Shewalter, transferred from Outwood, Ky., to Aspinwall, Pa.

REGIONAL OFFICES

Dr. Charles R. Bird, resigned at Indianapolis.
Dr. Edward W. Finn, resigned at Boston.
Dr. Jasper E. Guernsey, appointed at Helena, Mont.
Dr. Ralph R. Harris, resigned at Cleveland.
Dr. Mansell B. Holmes, resigned at Dallas, Texas.
Dr. Warner L. Lindsay, resigned at Salt Lake City.
Dr. Frank E. McClane, resigned at Detroit.
Dr. Carl W. McGaughey, transferred from Cincinnati to Chicago.
Dr. Albert J. Weirick, resigned at Chicago.

Foreign Letters

LONDON

(From Our Regular Correspondent)

May 25, 1927.

Ernest Henry Starling

The death of Ernest Henry Starling, C.M.G., M.D., F.R.C.P., F.R.S., Foulerton research professor of the Royal Society, while on a voyage for his health in Jamaica, removes one of the greatest physiologists of the world, whose work on the internal secretions was epoch-making and on the circulation of the first importance. After a brilliant career at Guy's Hospital, he graduated in medicine in the London University in 1888. He continued his studies at Heidelberg under Kuhne, and became demonstrator of physiology at Guy's in 1889 and joint lecturer in the following year. He studied under Heidenhain at Breslau, which led him to take up the study of lymph formation. In 1889 he succeeded Schäfer as professor of physiology at University College, London. There he not only taught physiology but made most of the researches which have made him famous. Much of his work was done in collaboration with his brother-in-law, William Bayliss, also a great physiologist. Starling's interest in physiology was general, but those physiologic processes which seemed susceptible of interpretation in terms of chemistry and physics most attracted him.

His first paper, written with Bayliss in 1891, was on electromotive phenomena of the mammalian heart. Waller had recently studied the electrical variation of the heart. Starling thought that, by photographing the movements of the capillary electrometer connected with electrodes placed in different positions on the naked heart in the anesthetized animal, much might be learned of the nature of the cardiac contraction. At that time any sort of muscular continuity between the auricles and the ventricles was denied, and the view that conductivity was due to some nervous network supplying the fiber was in favor. Bayliss and he set out to ascertain the course and time relations of the wave of contraction in the ventricle, the nature of the transmission from auricle to ventricle, and throughout the ventricle. They showed that (1) the ventricular contraction is a single wave starting from the base; (2) there is a natural block at the auriculoventricular groove, and (3) the rate of transmission of the contraction wave is about 5 meters a second. They thus made an important advance in our knowledge of cardiac contraction. They next investigated the action of the vagus and accelerator nerves on the auricles, on the ventricles, and on the conducting power of the auriculoventricular junction in the mammal. The effects of these nerves on the heart of frogs and tortoises had been previously studied by Gaskell and Heidenhain, and that of the vagi on the auricle of mammals. Bayliss and Starling showed that there was no essential difference between mammals and cold-blooded animals; that the vagus depresses conduction in auricle, auriculoventricular junction, and ventricle; and that the accelerator nerves have the opposite effects. They next made an exhaustive study of the simultaneous changes in the arterial and venous pressures of various regions of the body under a great variety of experimental conditions and showed the universal applicability of the principle of the circulation worked out by Ludwig.

In 1892, Starling investigated the mechanism of lymph flow. At first he adopted the interpretation of Heidenhain that the lymph formation could not be explained by filtration and that it was necessary to suppose a selective activity of the vessel wall. But later he came to the conclusion that it was unnecessary to assume a secretory activity of the endothelium, and that there was no experimental fact inconsistent with the view that lymph formation was a function of two factors —permeability of the vessel wall and intracapillary pressure. But to these he had afterward to add another factor—the osmotic pressure of the colloids, to which the walls of the capillaries are relatively impermeable. He showed that hydrostatic pressure and osmotic pressure with altered permeability of the endothelium can explain edema and pleural effusion. His work with Bayliss is an important advance. He showed that (1) peristaltic contractions are coordinate reflexes carried out by the local nervous mechanism and independent of the central nervous system; (2) local stimulation of the intestine produces excitation above, inhibition below, and (3) besides the local mechanism, every part of the intestine is subject to the control of the central nervous system through the splanchnics and vagi, the former being inhibitory and the latter containing both augmenting and inhibitory fibers.

Next came their epoch making work on pancreatic secretion. They discovered secretion, and this led to the introduction into physiology by Starling of a new conception—that of "hormones," or "chemical messengers." This work culminated in his Croonian lectures to the Royal College of Physicians in 1905 on the chemical correlation of the functions of the body. In 1909 he returned to the subject of his earliest work—the physiology of the heart. He devised his now famous "heart-lung preparation," in which the lesser circulation is intact but the only paths from the left ventricle to the right auricle are through the coronary arteries, and an artificial connection in which the resistance can be regulated. He showed that cardiac muscle, like voluntary muscle, contracts more forcibly as it is stretched even up to the point at which the texture is fractured. Therefore, to work at greatest efficiency a heart must first dilate, which it inevitably does, as the pressure in front of it increases. This Starling called the "law of the heart." In his Harveian oration of 1923 he said: "The heart has thus the power of automatically increasing the energy evolved at each contraction in proportion to the mechanical demands made upon it, behaving in this way almost like a sentient, intelligent creature." In 1920, with Anrep, by an ingenious cross-circulation method, built up on his heart-lung preparation, he showed that whereas rise of aortic pressure leads to dilatation of the blood vessels as long as the depressor nerves are intact, change in the blood pressure in the supply to the brain produces the reverse change in the pressure of the rest of the body. These fundamental laws of regulation had been suspected but never before established.

Fatal Administration of Carbon Dioxide in Mistake for Nitrous Oxide

An inquest was held by the deputy coroner for the city of London, on the body of a woman, aged 35, who died in St. Bartholomew's Hospital. An anesthetic was given to the patient for an operation, and a few minutes later she showed signs of failure. Efforts to restore animation, including heart massage, were tried for seventy-five minutes, without success. Sir Bernard Spilsbury, who made a necropsy, stated that the woman was quite healthy, and the operation that she was to have had was often quite successful. The cause of death was asphyxia from carbon dioxide gas, which was given sometimes in small quantities as a stimulant. The anesthetist said that he began with gas and oxygen and turned on carbon dioxide instead of nitrous oxide gas. He used 80 parts of carbon dioxide to 20 parts of oxygen, instead of 80 parts of nitrous oxide to 20 parts of oxygen. The dioxide cylinders were painted green down the sides and black on top, and his mistake occurred through his standing up and looking at the cylinder from above instead of from the side. To the question of the coroner as to whether the mistake might have occurred at other times he

replied in the affirmative and suggested that the cylinders should be green right up to the top and that there should be a different tap. The anesthetist added that he realized his mistake in three minutes, and before the patient was moribund, and he at once asked for strychnine. Everything possible was done for her. During the past twenty years he had given about 20,000 anesthetics. Recording a verdict of "death from misadventure," the coroner said that the anesthetist admitted that he made a mistake and there was no evidence of negligence.

The Prevention of Diphtheria

A report on "The Prevention of Diphtheria," by Dr. J. Graham Forbes, has been issued by the Medical Research Council. It was originally prepared from the information of the Public Health Committee of the London County Council, and is a comprehensive survey of the methods for the prevention of diphtheria which have been practiced on a large scale during the past ten years in America, and to a much less, though growing, extent in Great Britain. The antitoxin treatment of the disease brought down the case mortality quickly from 30 to below 10 per cent, but since 1904 the decline, though continued, had only been from about 9 to about 7 per cent. During the whole time of the use of this method the attack rate and the virulence of the disease had been increasing. In London, for instance, between 1904 and 1924 the attack rate per thousand persons living rose from 11.2 to 19.1, and the deaths from 0.99 to 1.33. The cost of applying to the 620,000 children of the London schools the Schick test for diphtheria and prevention of the disease by active immunization would be $500,000, inclusive of extra-medical service, which might amount to $425,000. During 1921 the cost of diphtheria alone to London taxpayers was estimated at about $2,500,000 and the cost of every case of diphtheria at about $150, a sum which would cover the cost of protecting 200 children. After analyzing the results of preventive work in Great Britain and also for many countries abroad the conclusion is reached that the Schick test and immunization constitute one of the most notable advances in preventive medicine. Their systematic adoption would result in a great yearly saving of child life, notably in London, where, though diphtheria has been more generally prevalent and presents a more pressing and difficult problem than in the provinces, no coordinated effort has been made to introduce immunization. The problem calls for the closest cooperation of all authorities concerned, whether public health, administrative or educational, particularly in London, where, for diphtheria, the attack rate surpasses, and the mortality rate nearly so, that of any other city in Great Britain, and almost every other capital in Europe, if not the world.

Medical Research in the Colonies

At the recent colonial conference, especial attention was given to medical research and medical education, to the training of natives as dispensers and sanitary officers, and the training of native women as general nurses and workers at child welfare centers. The provision of efficient sanitary services, including European and native inspectors, was also discussed. There are now medical research institutes more or less adequately staffed in the West African, East African, Middle Eastern, and Far Eastern groups of colonies, and in the main the colonial governments are alive to the importance of medical research, and within the limit of their resources are giving it adequate support. There is need, however, for more effective contact between research workers in the tropics and those engaged in similar activities in Great Britain and other countries, especially as it is becoming recognized that medical research has no colonial boundaries and that research in the tropics may have an important bearing on disease problems in temperate zones.

PARIS

(From Our Regular Correspondent)

May 25, 1927.

Statistics on Cancer of the Tongue at the Fondation Curie

MM. Roux-Berger and Octave Monod have collected statistics on cases of cancer of the tongue, in which treatment by radium and by roentgen rays was given at the Fondation Curie, from Jan. 1, 1920, to Dec. 31, 1925. The report covers 311 cases, 287 of which were studied in the most remote stages. There were seventy-seven recoveries of from one to six years' standing, or an equivalent of 26.7 per cent. Recoveries are becoming more numerous, owing to the progress of technic. Anterior dorsolingual cancers were almost all treated by the introduction of radium; the posterior dorsal cancers by radium, with or without exterior irradiation (the combination of the two methods seeming to give the best results). In some cases, roentgen rays or mere external irradiations were employed, with negative results. In the treatment of infralingual cancers, the use of plaster casts appeared to give the best results. An important improvement in technic consisted in removing them, as far as was feasible, from the maxillary arch to prevent radionecrosis otherwise frequent. A large number of patients classed among the "failures" were cured of their local lesion but developed later glandular metastases. The results of the treatment of adenopathies are much more difficult to appraise, for all the cases in which an operation was not performed leading to recovery remain doubtful, since the inflammatory or neoplastic nature of the glands was not ordinarily verified histologically. Of thirty-seven patients who did not present glands clinically distinguishable, degeneration of glands was noted in seven later. On the other hand, of forty-two evident adenopathies not treated, eleven resulted in recovery. The introduction of radium, though it may effect great improvement, will not of itself cure adenopathy, for it is inapplicable to the small deep-lying glands, which are numerous. Associated with exterior apparatus acting on a surface of skin 7 or 8 cm. wide, it gives better results. But cancericidal doses are difficult to reach and the preferred treatment appears to be a combined radium and surgical treatment.

The Decrease in the Consumption of Alcohol in France

The administration of indirect taxes, which records the imposts collected on alcohol, has issued a report from which it would seem that the consumption of alcohol in France has diminished by 46 per cent in thirty years. According to the statistics cited, the total consumption of alcohol must have decreased by 735,685 hectoliters, and the average per individual by two liters. These results appear due, in part, to the activities of the antialcoholic leagues, but particularly to the greatly increased tax imposed by the state on alcohol. However, the physicians in the hospital services have not observed a diminution in the number of patients whose condition was due to or aggravated by the excessive use of alcohol. M. Achard has even declared that, since the war, alcoholism has appeared to him to be on the increase, especially in women, in whom it was formerly exceedingly rare. There seems to be no other explanation for the discordant views than that the tax on alcohol is in many instances fraudulently evaded, for it is a common observation that fraud develops apace when taxes are raised to a high level. There is in France an unfortunate law on the statute books, the abolition of which has been perseveringly demanded by the hygienists but without avail, which authorizes every

producer of wine and cider or grower of fruits to distil 10 liters of brandy each year for his personal use without payment of a tax on it. The law was suspended for a time immediately after the war, during the first enthusiasm for far-reaching reforms. The members of the chamber of deputies, harassed by their constituents, have seen fit to restore the law, although the privilege was reduced to 10 liters. It has been calculated that the privilege is extended to several hundred thousand growers, which allows an immense quantity of alcohol to escape payment of duty. However, while it may be admitted that 46 per cent reduction may not give a faithful conception of the true state of affairs, there has been a notable diminution in the consumption of alcohol in France during the past thirty years.

Anatoxins

Anatoxins, the serums discovered at the Pasteur Institute by Ramon and widely used at present, are toxins attenuated by heating in combination with formaldehyde or sodium palmitate over a water-bath at a temperature of 38 C. for from fifteen to twenty days. They have then lost their toxicity and have become fit to use as vaccines. Antitetanic serum is today prepared in the same manner, and when injected does not cause a serum reaction. M. Vechiu, of the Société de pathologie comparée, has reported numerous observations from which it appears that formaldehyde and sodium palmitate injected in large doses in animals that have been given tetanic toxin do not exert in their organism any attenuating effect on the toxin.

Favus in France

Dr. Jeanselme, professor of dermatology and venereology at the Faculté de médecine de Paris, and Dr. Joannon have presented a communication on favus, or tinea favosa, which had become rare in France before the war, but which is again becoming frequent by reason of the increasing number of cases brought in by foreign immigrants. The latter come chiefly from Poland, Russia, Roumania and Armenia, and, for the most part, are crossing France on the way to the United States, but they are prevented from continuing their journey by the rigorous sanitary control that is imposed in France on these immigrants. Immigrants are sent back to France by the American authorities when, as sometimes happens, they succeed in escaping such control. In that case they become stranded in Paris and are sent to the service of Dr. Jeanselme in the Hôpital St. Louis, in which are centralized all the cases of leprosy discovered among the traveling foreign element. This fact is just one more added to the many that go to prove that an energetic sanitary control of immigrants in France is needed such as is demanded unceasingly by Prof. Léon Bernard before the League of Nations, patterned after the American system, although the administration of such a system will be admittedly much more difficult in France because of the long extent of the land frontiers and the ease with which these may be crossed.

Agreement of the Composition of a Product with the Announcements on the Label

The manufacturer of a powder used in the preparation of a table beverage was summoned before the correctional court for having mentioned on the label two products of which according to analytical chemists, there were only "traces" present. The procurator of the department of the Seine had concluded that the products were represented by too small quantities to be designated. The court, however, decided that the defendant had not violated the law of 1905 pertaining to fraudulent practices but, on the contrary, was quite within his rights in mentioning all the substances composing the product, irrespective of the quantity present, minimal though it might be, and rendered a judgment of acquittal.

Information Bureau Regarding Spas and Climatic Resorts

A French information bureau regarding spas and climatic resorts has been opened in Paris, 15 rue Royale (Office thermal et climatique français), the object of which is to aid patients, French and foreigners, in the selection of suitable places. The bureau will furnish all information needed in regard to "cures" (cost and nature of treatment). It will without charge reserve rooms in hotels in accordance with requirements and at prices compatible with the resources of each individual. For journeys it will issue special tickets and will provide means of transportation not only to the health resorts but also for drives and excursions. The bureau states that it will endeavor to procure everywhere special terms for physicians and their families.

RIO DE JANEIRO

(From Our Regular Correspondent)

May 15, 1927.

Complement Fixation in Leprosy

Dr. J. M. Gomes of São Paulo has recently studied the value of several complement fixation tests in leprosy. The Wassermann test is practically useless for diagnostic purposes since leprous serums deviate the complement with a syphilitic antigen almost as well as syphilitic serums. The Kolmer modification and Kahn's precipitation test seem more advantageous as, according to some workers, they are absolutely negative in leprosy. The ideal reaction should be, however, positive for leprosy and negative for syphilis. Dr. Gomes aimed at three objectives: to secure one more agent for early diagnosis; a better differentiation between the two diseases, and a means of showing the coexistence of both leprosy and syphilis. Gomes described a number of his cases to show the advantage gained by treating in such coexistent infections the syphilitic process before instituting treatment for leprosy. His work followed the lines of Dreyer's and Taylor-Malone's experiments on defatting acid-fast bacilli. For his complement fixation tests he used *Streptothrix leproides*, after defatting with olive oil and acetone, according to Mejunkin's technic. Altogether, 167 serums from normal subjects and patients with syphilis, tuberculosis, skin diseases and actual or suspected leprosy were studied. The reaction proved negative in all these conditions, with the exception of leprosy, and a slightly positive result in a case of tuberculosis. In leprosy, the positive results reached 82.29 per cent, distributed as follows: mixed type, 95.23 per cent; tubercular, 88.88 per cent; anesthetic, 87.50 per cent; maculo-anesthetic, 70.37 per cent; fruste forms, 50 per cent. The negative results were mostly among cases either cured or recovering. Among twenty-eight leprosy carriers, a number of them without clinical signs, 37.71 per cent were positive.

Fuchs in Brazil

At the invitation of the Rio de Janeiro medical school, Prof. E. Fuchs of Vienna has come to give a series of lectures on ophthalmology.

Enormous Number of Gallstones in a Patient

Among other interesting disclosures in a patient operated on for gallstones, Prof. Brandão Filho mentions the large number, 1,445, of calculi in the gallbladder. Most were small, but some were as large as hazelnuts. The strangest thing was the complete lack of any signs of pericholecystitis in spite of so many stones. The patient never had jaundice, despite the frequent attacks which reflected the migration of

stones. These, however, were small and did not block the common duct with consequent retention of bile.

Uselessness of Steinach's Operation in Parkinson's Disease

In the *Lancet*, some time ago, Walker and Cook reported encouraging results in three cases of paralysis agitans in which Steinach's operation was performed for rejuvenation purposes. Brandão Filho tried the operation in a case of the same disease, with no improvement whatever afterward. Of course, one case is not enough to afford a basis for passing on the merits of any treatment.

The New Cancer Institute

The new Cancer Institute of the Oswaldo Cruz Foundation has all possible equipment. The Laboratory of Scientific Research has all the material necessary for pathologic, therapeutic, surgical and radiologic work. All kinds of animals will also be available, the necessary accommodations being provided for them. The hospital department is divided into two sections: hospital proper and dispensary. The hospital is again subdivided into two sections: roentgen-ray and Curie, devoted to roentgen-ray and radium therapy, respectively. The upper floors have wards for needy patients. The third floor is reserved for pay patients. There is little question as to the new institution being the largest and perhaps best equipped among all those devoted to cancer.

ITALY

(From Our Regular Correspondent)

March 31, 1927.

The Death of Antonio Carle

Italian universities have suffered another loss in the death of Prof. Antonio Carle, director of the surgical clinic of Turin and chief surgeon in the Ospedale Mauriziano of that city. Born in 1855 in the province of Cuneo, Carle was graduated at Turin and continued his studies in Billroth's clinic. His first important researches were studies on tetanus. There followed researches on the circulatory changes in the brain in anesthesia; experiments on typhoid; studies, in collaboration with Lustig, on the etiology of endemic goiter, and studies on benign conditions of the stomach and their treatment by gastro-intestinal lavage. In 1893, he was made professor of special surgical pathology at the University of Turin, and in 1900 he became the director of the Clinica Chirurgica. In addition to numerous monographs on the surgery of the stomach and of the thyroid, he wrote, in collaboration with Herlitzka, the chapter on uterine tumors for the Trattato italiano di chirurgia. He was a member of many scientific academies, national and foreign, and was for many years *"senatore del regno."*

National Congress of Hydrology and Climatology

The eighteenth Congresso nazionale di idrologia e climatologia will be held in Milan in the early part of October. The two main topics on the program are: (1) the present status of knowledge concerning the action of mineral waters, to be presented by Prof. Adriano Valenti, and (2) the sojourn of tuberculous patients in climatic resorts, with reference to legislation, therapy and hygiene. The leaders in this discussion will be Prof. Ambrogio Da Gradi and Dr. Emilio Silvano.

Opposition to Neomalthusian Propaganda

The new public safety law contains provisions directed against neomalthusian propaganda, and declares that writings, pamphlets, illustrations, and other means that serve to make known methods for the prevention of conception or for the interruption of pregnancy, even though such methods are applied under the pretext of therapeutics or in the name of science, are offensive to morals and good breeding. Likewise, the insertion in newspapers of notices or correspondence pertaining to neomalthusian practices is prohibited.

Vital Statistics

Dr. Molinari has recently published a series of vital statistics on the commune of Milan for the year 1925. The population of Milan, the capital of Lombardy, as of Jan. 1, 1925, was 864,654, exclusive of the garrison. The number of marriages contracted in Milan in 1925 was 6,362, or 7.34 per thousand inhabitants. The total number of births was 12,720 (6,480 males and 6,240 females), or 14.7 per thousand inhabitants. The birth rate (which continues to decrease) is one of the lowest in the large cities of Italy. The birth rate for Rome was 24.75; Naples, 25.43; Turin, 11.94; Genoa, 12.62; Florence, 25.59, and Bologna, 27.16.

The total number of deaths in Milan in 1925 was 11,627, or 13.58 per thousand inhabitants. The death rate in Rome was 16.44; Turin, 15.17; Venice, 18.93.

Provisions for Child Welfare

At recent sessions, the executive committee of the Opera nazionale per la protezione della maternità e dell' infanzia decided to establish in Latium four ambulant chairs of child welfare, to be delegated to trusted physicians of the society. The committee plans to create also a first nucleus of fifty-four obstetric and pediatric advisers in a like number of communes of the realm, together with permanent seaside colonies for the children of government employees, who will pay a low rate, while the major expense is assumed by the welfare society.

An Exposition of Italian Universities

The second exposition of the universities of Italy will be held in Rome in August. At the same time, students from all countries will convene at Rome to take part in the congress of the international confederation of students.

BERLIN

(From Our Regular Correspondent)

May 28, 1927.

Congress of the German Society of Internal Medicine

(Continuation)

Of the remaining addresses — to the number of about 100 — delivered at the Congress of the Deutsche Gesselschaft für innere Medizin, only the most important can be mentioned. In the field of nervous disease, Hohmann of Cologne spoke on the galvanic method of testing stimulability in organic neuroses. Before psychotherapy is applied, it must be determined to what extent psychic disturbances are the cause and how far peripheral failure of vegetative functions may be incriminated. In organic disorders of purely psychogenic origin, increased stimulability is absent. Such conditions, in contradistinction to cases with increased stimulability, can be cured promptly and permanently by psychoanalysis or suggestion. The researches of Schön of Leipzig, with operative exclusion of controlling portions of the brain, on the rabbit, and analysis of the effect of morphine on the respiration of intact animals operated on, leads to the assumption of the following control centers for respiration: in the posterior portion of the midbrain a stimulable center, and in the thalamus and cerebrum retarding centers acting on the respiration.

Hansen and Gessler of Heidelberg were able, by means of hypnosis, so to change heat regulation in some patients that, when given the suggestion of heat, accompanied by simultaneous cooling, they behaved as if no cooling had taken place. No increase in the consumption of oxygen occurred. On the other hand, when the cooling was omitted and only

the suggestion of cold was given, an increase in the oxygen consumption amounting to from 30 to 40 per cent (the effect of a cold douche) was established with the Benedikt apparatus. Kauffmann of Cologne stated that, with endolumbar injection and lavage treatment with a quinine solution he had obtained good results in meningitis and other diseases of the central nervous system. He uses a special type of apparatus. Stahl and Busch of Rostock found as a by-effect of morphine (which could be eliminated by atropine) a reduction of resistance to toxins and a loss of weight in white mice.

Regelsberger of Erlangen reported his researches on the sleep curve in man, as determined by the Trendelenburg apparatus, and stated that there is a high peak just before midnight and another high peak (though not so high) just after midnight; in pathologic cases the reverse condition prevails. Friedberger of Berlin discussed the influence of diet on tumor growth in rats, and stated that a diet consisting of raw foods favored such growth, whereas, on a diet of overcooked food, only 42.9 per cent of the tumors increased in size. With the best food (egg yolk), from the standpoint of the caloric estimate, the tumor growth was also best.

In the field of research on the circulation, Bruhns of Königsberg brought out, following investigations on the elimination of cardiac standstill, that artificial respiration will not produce an emergency circulation. There is too little blood in the left heart and in the arteries, and the reddening of the skin associated with apparent death is due to the filling of the capillaries with venous blood through ejection of blood from the upper abdomen and the thorax. Also massage of the heart was shown to be important. Various medicaments, when injected into the heart, are likewise of value. The combination of heart massage with artificial breathing is needed, and simultaneously inflation with oxygen. For the relief of cardiac standstill Sylvester recommends artificial respiration in combination with rhythmic compression of the thorax and the inflation of oxygen. Schott of Cologne was able in the rabbit to effect partial resuscitation of an isolated heart. An essential factor was the expansion of the heart wall. Also in a dead person, by the intravenous induction of oxygen the heart can be made to beat from two to three hours after the electrocardiogram has ceased to show that the heart is functioning.

Guggenheimer and Fisher (Berlin) reported on the effects of exceedingly dilute solutions of iodine and bromine, which produce in the cat heart distention of the vessels and increased velocity of circulation.

Magnus-Levy and Siebert (Berlin) found in some types of grave nephritis a retention of ammonia corresponding to the gravity of the case and recommend reduction of the protein intake and the administration of basic salts.

Metabolism problems came in for comprehensive treatment. Grafe and Meythaler (Wurzburg) established by their researches that the blood sugar itself checks insulin production and thus constitutes a regulating hormone, to a certain extent. Depisch of Vienna found that the degree of alimentary hypoglycemia represents a measure for the stimulability and performance of the islands of Langerhans.

In patients with exophthalmic goiter the islands of Langerhans oppose, to a certain extent, the tendency toward loss of weight. In obesity there are cases that owe their origin to an increased action of the islands.

Deusch of Rostock did not find in 100 cases of diabetes mellitus either clinical manifestations of a disturbance of the external pancreas secretion or any changes in the normal content of ferments as represented by trypsin, diastase and lipase. After intravenous injection of insulin, there resulted an increase of the external pancreas secretion, so that insulin in this respect is an antagonist of epinephrine. The effect is produced through stimulation of the vagus. Cobet and Nothmann (Breslau) found insulin in the urine of healthy subjects every day in quantities equal to from 15 to 30 injection units; in grave diabetes the quantity was materially lessened. Insulin administered in coma or precoma is not found in the urine. Following retention of carbohydrate, insulin-like substances are excreted in larger quantities; in the diabetic patient, however, the quantity of insulin is diminished for a few days. Also in the urine of the healthy dog insulin was found, but it disappears within a few days after the extirpation of the pancreas. Lublin of Breslau called attention to the mutual influence exerted on respiratory metabolism by insulin and synthalin, on the one hand, and by epinephrine and similar substances, on the other hand. The former facilitate the change of carbohydrates into fat; the latter make it more difficult or prevent it. Petrén of Lund gave his observations on sixty-eight instances of coma occurring in fifty-five diabetic patients during the past four years, who were treated with insulin. Three patients died from coma in the hospital; one because too little insulin was given him, and the two others because they refused insulin treatment; four died from coma at home and seven from other diseases. Injections of dextrose are not recommended, but rather a sensible diet with much fat, cream and vegetables (Petrén diet). Meyer-Bisch of Göttingen found in dogs and rabbits a blood sugar increasing action of the pancreatic juice that had been subjected to ultrafiltration, indicating the presence of an anti-insulin-like substance. In an alkaline animal there is a diminution of the blood sugar. Marx of Bonn succeeded through the ingestion of sugar in the healthy subject in producing changes in the water balance of the tissues, and in the diabetic patient, by the ingestion of water, he effected changes in the blood sugar content.

In connection with the roentgenologic diagnosis of the abdominal and thoracic organs, Wolf of Davos demonstrated the funnel shaped shadow in certain cases of tuberculosis. Götte demonstrated in subjects whose general clinical condition was but slightly disturbed extensive bronchopneumonic foci in the lung, which undergo rapid changes and are regarded as primary influenzal pneumonia. Paul Krause of Münster holds that iodized sesame oil as a contrast agent is indicated only in case operation is to be done, as injuries are apt to occur even with careful technic.

Pribram of Berlin demonstrated the method of roentgenologic examination of the duodenum with simultaneous injection of air and a small amount of the contrast agent. Gloor of Zurich emphasized that four symptoms were important for the early diagnosis of tuberculosis of the intestine: anemia, constipation, a negative Pirquet reaction and the presence of blood in the stool. Singer of Vienna recommended as cathartics quinine derivatives, which stimulate peristalsis of the large intestine. The application is intravenous, or in the form of suppositories or as an enema.

Marriages

NEWELL WALTON GILES, Amherst, Mass., to Miss Emma Virginia Springer of Jackson Heights, Long Island, N. Y., May 23.

GEORGE TRYON HARDING, III, Worthington, Ohio, to Miss Mary Virginia Woolley, of Atlanta, Ga., June 2.

CHARLES WILLIAM MAYO, Rochester, Minn., to Miss Alyse Varney Plank of Philadelphia in June.

WALTER NATHANIEL NELSON, Bridgeport, Conn., to Miss Rachel M. Atwell of Durham, May 7.

JOSEPH G. MAYO, Rochester, Minn., to Miss Ruth Rakowsky of Joplin, Mo., June 11.

KONRAD FRANK to Miss Marie Fee, both of St. Louis, June 1.

Deaths

Virgil Pendleton Gibney ✠ New York; Bellevue Hospital Medical College, New York, 1871; at one time clinical lecturer, clinical professor and professor of orthopedic surgery, Columbia University College of Physicians and Surgeons, New York; first president of the American Orthopedic Association; since 1922 surgeon emeritus of the Hospital for the Ruptured and Crippled; formerly on the staff of the St. John's Guild Hospital, New York Nursery and Child's Hospital and the Neurological Institute, New York, and the Bridgeport and St. Vincent's hospitals, Bridgeport, Conn.; author of "The Hip and Its Diseases"; aged 79; died, June 17, at his home in Bridgeport, Conn.

Bennett Franklin Davenport ✠ Watertown, Mass.; Medical Department of Columbia College, New York, 1871; Harvard University Medical School, Boston, 1871; professor of chemistry, Massachusetts College of Pharmacy, 1879-1886; dairy inspector for the city of Boston, 1882-1885; chemist, Massachusetts State Board of Health, 1882-1892, and the state dairy bureau, 1892-1921; chairman of the Watertown health park and water boards; formerly coroner of Suffolk County; aged 82; died, June 3, at the Cambridge (Mass.) Hospital, of embolism following an operation for enlarged prostate.

Marie Charlotte Schaefer, Galveston, Texas; University of Texas School of Medicine, Galveston, 1900; member of the American Association of Anatomists; associate professor of histology and embryology at her alma mater; aged 52; died, May 27, at the John Sealy Hospital, of coronary thrombosis.

Clarence Wheeler Bassett ✠ Sharon, Conn.; Medical Department of the University of the City of New York, 1882; health officer of Sharon; on the staff of the Sharon Hospital; aged 69; died, March 17, at St. Francis Hospital, Poughkeepsie, N. Y., of carcinoma of the colon.

Joseph Leo McGinley, Wilkes-Barre, Pa.; University of Pennsylvania School of Medicine, Philadelphia, 1912; member of the Medical Society of the State of Pennsylvania; served during the World War; aged 46; died, May 18, of pulmonary tuberculosis.

Porter Thomas Fleming, Enterprise, Ala.; Louisville (Ky.) Medical College, 1894; member of the Medical Association of the State of Alabama; on the staff of the Coffee County Memorial Hospital; aged 59; died, March 28, of cerebral hemorrhage.

Jesse Wyllis Hassler ✠ Belmar, N. J.; Hahnemann Medical College and Hospital of Philadelphia, 1892; member of the Florida Medical Association; aged 57; died, May 29, at Reading, Pa., following an operation for carcinoma of the pancreas.

Sylvester Edward Donovan ✠ New Bedford, Mass.; Medical Department of the University of the City of New York, 1894; member of the New England Pediatric Society; on the staff of St. Luke's Hospital, where he died, May 30, of heart disease.

Loyal H. Tillotson, Painesville, Ohio; Homeopathic Hospital College, Cleveland, 1885; member of the Ohio State Medical Association; aged 67; died, March 27, at St. Petersburg, Fla., of progressive bulbar paralysis.

William Henry Axtell ✠ Bellingham, Wash.; Medical College of Ohio, Cincinnati, 1891; member of the American Proctologic Society; served during the World War; aged 64; died, May 16, of angina pectoris.

James Noyes Lewis, Providence, R. I.; Medical Department of Columbia College, New York, 1874; member of the Rhode Island Medical Society; aged 77; died, May 28, at Ashaway, of heart disease.

Charles Denny Kimball, New York; University and Bellevue Hospital Medical College, New York, 1902; also a dentist; aged 52; died, May 25, at his home in New Rochelle, of pulmonary hemorrhage.

Ira Smith, Commerce, Okla.; University of Arkansas School of Medicine, Little Rock, 1907; member of the Oklahoma State Medical Association; aged 57; died, April 30, at a hospital in St. Louis.

William Bruce Macbean ✠ Yonkers, N. Y.; Columbia University College of Physicians and Surgeons, New York, 1903; aged 44; died suddenly, May 26, of angina pectoris and chronic nephritis.

John Howard Payne, Boston; Boston University School of Medicine, 1879; emeritus professor of ophthalmology at his alma mater; aged 72; died, May 29, of heart disease.

Newman T. B. Nobles, Cleveland Heights, Ohio; Cleveland University of Medicine and Surgery, 1896; aged 53; died, May 22, of embolism, following an operation on the gallbladder.

Charles Cincinnatus Henry, Brooklyn; Long Island College Hospital, Brooklyn, 1883; aged 78; died suddenly, May 16, at Baltimore, of skull fracture received in an accident.

William W. Baker, Washington, D. C.; Howard University School of Medicine, Washington, 1885; aged 79; died, May 16, at the Sibley Hospital, of injuries received in an automobile accident.

Thomas M. McIlvaine, Peoria, Ill.; Rush Medical College, Chicago, 1881; for many years a member of the school board; aged 73; died, May 17, at the Proctor Hospital, of pneumonia.

Walter Edwin Tiffin, Detroit; Detroit College of Medicine and Surgery, 1894; member of the Michigan State Medical Association; aged 60; died, May 23, of cardiorenal disease.

John J. McGlade ✠ New York; Cornell University Medical College, New York, 1905; aged 44; was drowned, May 22, in the Peconic Bay, following an explosion on his launch.

Percy Lott De Nyse ✠ Richmond Hill, N. Y.; New York Homeopathic Medical College and Flower Hospital, New York, 1909; aged 44; died, May 20, of heart disease.

Hubert E. Zilisch ✠ Milwaukee; Marquette University School of Medicine, Milwaukee, 1923; aged 38; died, February 2, at St. Mary's Hospital, of nephritis.

Harold Bruce Boring ✠ Denver; Jefferson Medical College of Philadelphia, 1912; aged 40; died, May 13, at St. Luke's Hospital, of cerebral hemorrhage.

Rosamond Louise Cox, San Francisco; University of California Medical School, San Francisco, 1888; aged 70; died, June 5, of cerebral hemorrhage.

Charles B. Lenox, Ashland City, Tenn.; Vanderbilt University School of Medicine, Nashville, 1893; aged 60; died, May 18, of chronic nephritis.

Albion King Parris Harvey, Livermore Falls, Maine; Chicago Homeopathic Medical College, 1888; aged 72; died, May 26, of heart disease.

John Stonewall Dunn, Brooklyn; Memphis (Tenn.) Hospital Medical College, 1883; aged 65; died, May 23, of bronchopneumonia.

August Horn ✠ Baltimore; University of Maryland School of Medicine, Baltimore, 1888; aged 58; died suddenly, May 31, of angina pectoris.

Frederic F. Seville ✠ Chicago; University of Illinois College of Medicine, Chicago, 1895; aged 60; died, June 4, of lobar pneumonia.

David Hall Courtney, Morgantown, W. Va.; Jefferson Medical College of Philadelphia, 1886; aged 67; died, May 27, of heart disease.

John Bunyan Herbert, Monmouth, Ill.; Hahnemann Medical College and Hospital, Chicago, 1872; aged 74; died, May 19, of myocarditis.

Thomas Darling, Gresham, Ore.; Detroit College of Medicine and Surgery, 1889; aged 77; died, May 12, of valvular heart disease.

Clarence E. Monroe, Toledo, Ohio; Starling Medical College, Columbus, 1888; aged 71; died, May 15, of cerebral hemorrhage.

Charles Edwin Barnes, Omaha; College of Physicians and Surgeons, Chicago, 1903; aged 46; died, May 20, of diabetes mellitus.

Peter B. Dick, Kennard, Ind.; Eclectic Medical Institute, Cincinnati, 1874; aged 89; died, May 18, following a long illness.

J. E. Mumford, Pleasant Hill, La.; Louisville (Ky.) Medical College, 1875; aged 74; died, May 17, of angina pectoris.

Samuel P. Swearingen, Pasadena, Calif.; Columbus (Ohio) Medical College, 1883; aged 74; died, May 12, of influenza.

Casper L. Bacon, Muncie, Ind.; Cleveland Medical College, 1896; aged 73; died, May 13, of myocarditis.

CORRECTION

Dr. Maurice Rosenberg Is Not Dead.—Based on information from the superintendent of the hospital in which he was reported to have died, an erroneous notice of the death of Dr. Maurice Rosenberg was published in THE JOURNAL, March 26. Dr. Rosenberg writes that he is very much alive, hale and hearty, and not a victim of diabetes, of which he is reported to have died.

The Propaganda for Reform

IN THIS DEPARTMENT APPEAR REPORTS OF THE JOURNAL'S BUREAU OF INVESTIGATION, OF THE COUNCIL ON PHARMACY AND CHEMISTRY AND OF THE ASSOCIATION LABORATORY, TOGETHER WITH OTHER GENERAL MATERIAL OF AN INFORMATIVE NATURE

NATIONAL MEDICAL BUREAU, INC.

Physicians are being circularized by a concern having the somewhat imposing name, National Medical Bureau, Inc. The letterhead of this concern carries with it the idea that it is a nation-wide organization having offices in New York City, Chicago and Los Angeles, with a "Division Office" at South Bend, Indiana.

The circular letter which the National Medical Bureau, Inc., sends to a physician states that it is about to appoint a physician in his locality to care for its members. It explains that the appointee would receive "50 per cent of the monthly membership fees in payment for his services," and in addition, "all of the regular revenue he normally derives from his medicines, drugs, medical supplies, and surgical operations." As a further inducement to apply for the appointment, the physician is told that, if selected, he was "automatically made the family physician in more than 500 homes of the city," whereby he could quickly build a practice that normally would take from ten to twenty years. The circular letter stated, further, that the doctor's "monthly checks average $250."

These statements, if they mean anything, mean that the physician who signs up with the National Medical Bureau practically agrees to take care of 500 families for $250 a month, or at the rate of 50 cents a month ($6 a year) per family. Doubtless the medical service that such families would get would be in keeping with the amount paid the physician.

In order to qualify for the post of treating families at 50 cents a month, the National Medical Bureau outlines the requirements for appointment. These include:

1. Regularly kept office hours.
2. Maintaining neat, easily accessible offices.
3. The necessary instruments and equipment for surgical work.
4. The assurance that the physician would not charge excessive fees for services not covered by the membership.

As a further inducement, the physician is told that the "formal" mention of his name by the National Medical Bureau is a method of "indirect advertising" that "has a tremendous value."

Because the medical profession has been circularized, a letter was written to the National Medical Bureau at its Chicago address, asking certain pertinent questions, answers to which would permit inquiries from the medical profession to be answered intelligently. Specifically it was asked: Who are the incorporators of the National Medical Bureau, Inc.? Who are the officers? What is the character of the service that the National Medical Bureau, Inc., has to sell?

The letter, while sent to the Chicago office, was answered from South Bend and signed "W. Donald Dunkle, Division Director." Mr. Dunkle stated that a Mr. A. M. Nadel, who was out of the city, handled all the correspondence and that on his return, Mr. Nadel would be glad to answer any and all questions. A week later, a letter came from South Bend, signed "A M. Nadel, Division Director." Mr. Nadel, instead of answering "any and all questions," ignored the request for information regarding the incorporators and stated that the personnel of the board of directors had not been settled, all business being conducted by him.

Mr. Nadel was again written to and told that his letter threw but little light on a subject that was of peculiar interest to the medical profession. He was again requested to give the names of the incorporators, and attention was also called to the fact that, while the stationery of the National Medical Bureau gives the impression that the concern has offices in New York City, Chicago and Los Angeles, as well as South Bend, Indiana, all business seems to be done from South Bend. Mr. Nadel was asked for the names of the representatives in New York City, Chicago and Los Angeles, and also for the names of the individuals behind the National Medical Bureau.

After waiting another week, Mr. Nadel replied that the names of the incorporators were "of little or no importance" to the medical profession, and that the National Medical Bureau had not "seen fit to divulge" any of what he described as its "confidential information." He stated, further, that the personnel of the board of directors was still not settled, and that while they had New York City, Chicago and Los Angeles addresses, their entire activity was being conducted from South Bend, Indiana.

A letter was addressed to the Secretary of State of Indiana, stating that the National Medical Bureau, Inc., was doing business at South Bend and asking for the names of the incorporators. A reply was received from the Department of State declaring that the corporation division had no record of the National Medical Bureau, Inc., either as a domestic corporation which had filed articles of incorporation in Indiana, or as a corporation from some other state admitted to do business in Indiana. This may explain Mr. Nadel's airy dismissal of THE JOURNAL'S request for information regarding the incorporators as a matter "of little or no importance."

Correspondence

A TEST PROCEDURE FOR THE EASY DIAGNOSIS OF EPIGASTRIC HERNIA

To the Editor:—Epigastric hernia is more common than the meager references to it would lead one to suppose. The reason is failure in diagnosis; for unless one is particularly on the lookout for it, one can easily miss it and attribute the symptoms to something totally different. Not every epigastric hernia will necessarily produce symptoms, but a small one may cause a wide variety simulating the condition set forth by Friedenwald and Morrison (THE JOURNAL, Oct. 30, 1926, p. 1466).

During the last three years I have seen about a score of such cases. The diagnosis has been made in almost every case by a certain procedure of palpation and, if indicated, confirmed by laboratory and roentgen-ray tests, which, of course, were negative. A clue to the condition may often be obtained from the history, especially when the symptoms are associated with pain which has no relation to food ingestion. The onset of an acute attack may be sudden, and often starts with some bending or twisting movement of the body. The character of the pain is frequently described as dragging—as if the "spine were being pulled forward into the stomach"—making it difficult for the patient to assume the upright posture in comfort. The severity of the attack may be anything from the agony of a gallstone colic to a dull aching pain. Associated with this there may be nausea and vomiting, but there is always a tenderness in the region of the hernia. Careful palpation, however, reveals the tenderness to be more superficial than it would be in any pathologic gastric or gallbladder condition, deep pressure being no more uncomfortable than superficial.

The diagnostic procedure which is invaluable to a correct diagnosis consists in causing a divarication of the abdominal rectus muscles with the patient supine, through the strain of

lifting the head and shoulders off the table. With the abdominal wall relaxed, it is a matter of extreme delicacy to palpate adequately a small protrusion or hernia in the linea alba or semilunares, and as this relaxation is the usual status aimed at in any abdominal physical examination, it accounts for the frequency with which this condition is missed. When the abdominal wall is put on a strain, there will usually be seen in the average subject a shallow sulcus between the two rectus muscles, and if the finger is run down this sulcus the floor may readily be palpated for any small protrusions or depressions. When the patient is caused to cough, an impulse may or may not be elicited at one of these points. In some cases, however, there is a definite weakness of the fascial union of the recti, and then these muscles will widely diverge; instead of a shallow sulcus there will appear quite a deep wide groove and in extreme cases an actual gaping, through which the abdominal contents will protrude, causing a regular bulging which can be palpated, caused to receive an impulse through coughing, and returned to the abdominal cavity by manipulation. Indeed, I saw one such case in which, by the ordinary method of abdominal examination with the walls relaxed, no clue was obtained as to the condition, but when the patient strained to lift himself from the table a large bulging immediately appeared between the widely gaping rectus muscles which could be seen across the room. The diagnosis was immediately obvious. Since then I have used this procedure in every abdominal examination and by this means have been able to make a diagnosis of many epigastric hernias which I feel sure I would never have otherwise suspected.

The average man in general practice has doubtless seen several patients with gastric symptoms of indeterminate origin, who have drifted around from physician to physician, have been dosed with bismuth subnitrate and sodium bicarbonate, dieted and often hospitalized, but still have not been "cured." At last, through sheer lack of a better diagnosis, they are dubbed neurasthenics, and automatically any real interest in the case ceases. It is in precisely this class of unfortunates that the possibility of a small epigastric hernia should be considered, and I feel sure that a certain percentage will yield a positive diagnosis if submitted to the diagnostic procedure mentioned. Incidentally, ice to the epigastrium will usually relieve the pain of an acute attack.

HORACE F. W. WARDEN, M.R.C.S., and L.R.C.P.(Eng.),
Detroit.

POSSIBLE ARACHNIDISM

To the Editor:—The case reported by Dr. George L. Carrington (THE JOURNAL, April 30, p. 1395) as "Bilateral Diaphragmatic Pleurisy Simulating Perforated Gastric Ulcer" appears so typical of arachnidism that this diagnosis has been made independently by a number of physicians. Comparison with the description of arachnidism (THE JOURNAL, June 19, 1926, p. 1894) leaves little doubt as to the identity of the condition.

The history of a spider bite in a toilet followed in less than two hours by severe pains in the back and epigastrium, rapidly increasing in severity to the point of writhing and groaning from the intensity of the pain, with a feeling of impending death, vomiting, a rigid, boardlike abdomen, but without localized tenderness or point pain, a leukocytosis developing after several hours, a trace of albumin in the urine, and no response to large doses of morphine and codeine, occurring in a district like North Carolina (or any of our Southern states) where *Latrodectus mactans* is common, leaves little lacking for a diagnosis of spider bite poisoning.

Even the laparotomy with negative results may be considered part of the picture of arachnidism, as such operations have been performed in quite a number of cases which were later shown to have been instances of arachnidism.

The first recorded case of arachnidism in the United States was described by Hopton (*New York M. J.* **2**:297, 1829) nearly a hundred years ago, from the same state, North Carolina, and the first recorded death ascribed to spider bite poisoning was described by Dick in a letter in *Insect Life* (**1**:204 [Jan.] 1889) from the same neighborhood.

EMIL BOGEN, M.D., Cincinnati.

Queries and Minor Notes

ANONYMOUS COMMUNICATIONS and queries on postal cards will not be noticed. Every letter must contain the writer's name and address, but these will be omitted, on request.

THALLIUM ACETATE AS A DEPILATORY

To the Editor:—Do you think that 8 grains of thallium acetate to an ounce of cold cream, containing some zinc oxide, rubbed on the skin to destroy hair would be absorbed by the skin enough to cause falling of the hair on the head or elsewhere? Do you know of anything except electricity that will permanently destroy hair? Please omit name.

M.D.

ANSWER.—In all probability, thallium acetate in an ointment will not cause falling of the hair when applied locally. If it will do so, the internal use of the drug can be avoided. There are other methods of destroying hair beside electrolysis, but no other that is safe.

"APOCACTIN" AND "PASCONIA" MERRELL

To the Editor:—I have received a letter from the William S. Merrell Company suggesting that I consult the firm's catalogue for "the particular kind of remedial agents for the different pathologic conditions met in daily practice." As an illustration of the helpful (?) advice that may be had from a perusal of the catalogue, three products are mentioned: "Apocactin," "a combination of drugs you don't often encounter"; "an efficient, nontoxic coagulant, Fibrogen"; and "Pasconia, a sedative and stabilizer in the erratic action of the 'nervous heart.'" I am not interested in the coagulant for the reason that it has not been admitted to New and Nonofficial Remedies along with similar preparations made by other firms. I am not much interested in "Apocactin" and "Pasconia" either, for reference to the catalogue shows that they belong to the genus "shotgun proprietary specialty" whose very complexity is sufficient to condemn them. However, I have become curious about the drugs that are said to be contained in them. They are not included in Useful Drugs or even in the pharmacopeia. Will you tell me something about them? Are they new drugs which have been recently discovered? According to the catalogue, "Each 10 minims [of Apocactin] . . . represents F. E. Crataegus 2½ mins., F. E. Cactus 1 min., F. E. Apocynum 1-5 min., F. E. Avena Sativa 2 mins., F. E. Collinsonia 2 mins." For Pasconia, the following statement of composition is offered: "Each fluidounce represents: Passiflora Incarnata, green drug, 120 gr.; Avena Sativa 120 gr.; Collinsonia, green drug, 24 gr. In a suitable cordial."

H. T. P., M.D., Chicago.

ANSWER.—The drugs that make up "Apocactin" and "Pasconia" are not to be found either in Useful Drugs or in the United States Pharmacopeia. Some are not even included in the National Formulary, which aims to include preparations of drugs which are supposed to have any usefulness at all. All belong to that larger and ever growing collection of drugs that have been discarded because they were found to be inert or inferior to other drugs having the same action.

The following is the estimate of the Council on Pharmacy and Chemistry as given in the Epitome of the U. S. Pharmacopeia and National Formulary for those drug constituents of "Apocactin" and "Pasconia" which are included in the National Formulary: Passiflora (passion flower) "Exploited by manufacturers of proprietary medicines for the treatment of insomnia, but probably inert." Avena Sativa (oat) "A constituent of certain nostrums; has no place in the materia medica." Apocynum (Canadian hemp) "Cardiac tonic of digitalis group; unreliable as to rate of absorption."

Those drugs contained in the proprietaries but not even described in the National Formulary are Collinsonia and Crataegus. Collinsonia canadensis (stone root) was included in a report of the Council on Pharmacy and Chemistry, "Some Unimportant Drugs" (Reports Council Pharmacy and Chemistry, 1912, p. 36) which states that for some time the drug

had a reputation as an antispasmodic, astringent and diuretic, and that although there appears to be some evidence that this drug possesses some activity, this seems to be such as is better exhibited by other drugs. Crataegus Oxycantha (hawthorn) was proposed for use in cardiac disease many years ago, but has not gained a place in our materia medica.

MILK AND RICKETS — INFANT'S MILK REQUIREMENT

To the Editor:—1. Several well known German pediatricians state that too much milk, whether breast or bottle, if given to an infant for a considerable length of time, plays an important part in the etiology of rickets. What is the explanation? 2. Considerable discussion has been given by many European pediatricians to the amount of whole milk that the healthy infant requires daily. Many state that no infant in the first year requires more than 500 cc. of milk daily, reducing the milk even still further in the second year to 400 cc. and later to 200 cc. daily in normal infants. Kindly explain the advantages derived from these reductions, and state whether such reductions are advisable in healthy infants.

SAMUEL GROSSMAN, M.D., Taunton, Mass.

ANSWER.—1. If an infant is kept on breast milk alone for too long a time it commonly develops rickets, probably not so much because of the milk as because of the absence of other foods. That too much breast milk in itself ever causes rickets is certainly doubtful. That prolonged feeding of an excessive amount of cow's milk, especially without an adequate addition of carbohydrates, produces serious disturbances in the infant's mineral metabolism is well known (Czerny's Milchnährschaden). Rickets is a common manifestation of this disturbance. In the production of rickets one must, however, always reckon with the other equally important fundamental factor: the absence of a sufficient amount of ultraviolet rays.

2. There is so much authoritative difference of opinion concerning the optimal amount of milk for the normal infant that this question cannot be answered dogmatically. There is no doubt that many infants, notably older ones, will do better if given less than the conventional quart of milk a day, especially if by so doing they will take other foods with greater readiness. The view that the amount should as a routine be reduced to 500 cc. a day during the first year, and even to 400 and 200 cc. during the second and third years, has only a limited adherence among "European pediatricians" and practically none in this country, except in the isolated case in which there is a resulting lessened appetite for other foods, or an intolerance for milk. The effect on the fecal flora of foods, such as carbohydrates, as compared with that of milk, is probably an important factor. The more recent tendency of the vitaminists and their lay followers to push milk to "a quart or more a day" takes cognizance of only one factor, which is, moreover, adequately represented in other foods, at the expense of the harm that may come from giving too much milk in the individual case. It is probably still a safe rule to offer a child, as a routine, as much of a quart of milk a day as he will take, unless there is some obvious reason for cutting down the amount.

TREATMENT OF HERPES

To the Editor:—I have under my care an unmarried woman, aged 29, who is suffering from recurring attacks of herpes labialis. The lesions have recurred at intervals of about six weeks for the last four or five years, and have occurred in one spot on the upper lip. There are no residuals noted between attacks. Many different local treatments have been tried, but these have been only partially successful, the lesion apparently running its course in spite of treatment. Her general health is good, and foci of infection have been searched for but not found. Would you kindly comment on this case and suggest local and general treatment?

JOHN W. VISHER, M.D., Waukesha, Wis.

ANSWER.—In patients who are subject to herpes almost any sort of a systemic upset is apt to produce it; also innumerable kinds of external irritation, such as driving in the wind, exposure to sunlight, or local irritants to the lips. Thus, in the prevention of herpes, all these things need to be guarded against as far as possible. Often the lips can be made less sensitive by the use of astringent applications. A good application of this sort is zinc sulphate, from 0.25 to 1 Gm. to 120 cc. of water. Begin with the weaker solution; sponge the lips with this once a day. If it does not produce irritation, increase the strength gradually to the point at which it begins to cause slight irritation; then go back to a solution that is just short of producing irritation. Also greasing of the lips with cold cream or with cold cream containing 4 Gm. of zinc oxide and 4 Gm. of calamine to 30 Gm. keeps them in good condition and tends to prevent the trouble.

Medical Education, Registration and Hospital Service

COMING EXAMINATIONS

ALABAMA: Montgomery, July 12-15. Chairman, Dr. S. W. Welch, Montgomery.

COLORADO: Denver, July 5. Sec., Dr. David A. Strickler, 1011 Republic Bldg., Denver.

CONNECTICUT: Hartford, July 12-13. Sec., Dr. Robert L. Rowley, 79 Elm Street, Hartford.

DISTRICT OF COLUMBIA: July 12. Sec., Dr. Edgar P. Copeland, Suite 110, 1801 Eye Street, Washington.

HAWAII: Honolulu, July 11-14. Sec., Dr. James A. Morgan, Young Bldg., Honolulu.

MAINE: Bangor, July 5-6. Sec., Dr. Adam P. Leighton, Jr., 192 State Street, Portland.

MASSACHUSETTS: Boston, July 12-14. Sec., Dr. Frank M. Vaughan, 144 State House, Boston.

MISSOURI: St. Louis, July 13-15. Sec., Dr. James Stewart, Jefferson City.

NORTH DAKOTA: Grand Forks, July 5-8. Sec., Dr. G. M. Williamson, Grand Forks.

OREGON: Portland, July 5-7. Sec., Dr. M. K. Hall, 816 Pittock Block, Portland.

PENNSYLVANIA: Philadelphia and Pittsburgh, July 5-9. Dir. Professional Education Bureau, Mr. C. D. Koch, Harrisburg.

RHODE ISLAND: Providence, July 7. Sec., Dr. B. U. Richards, Providence.

SOUTH DAKOTA: Huron, July 19. Dir. Medical Licensure, Dr. H. R. Kenaston, Bonesteel.

WASHINGTON: Seattle, July 11. Basic Science Examination, Seattle, July 7-8. Ass't. Director, Mr. George L. Berger, Olympia.

WEST VIRGINIA: Martinsburg, July 26. Commissioner, Dr. W. T. Henshaw, Charleston.

Oklahoma Reciprocity Meeting

Dr. J. M. Byrum, secretary of the Oklahoma Board of Medical Examiners, reports the meeting held at Oklahoma City, March 8-9, 1927, at which 17 candidates were licensed by reciprocity and 1 by endorsement of his credentials. The following colleges were represented:

College	LICENSED BY RECIPROCITY	Year Grad.	Reciprocity with
College of Physicians and Surgeons, Little Rock		(1910)	Arkansas
University of Arkansas School of Medicine		(1904)	Arkansas
George Washington University Medical School		(1925)	Dist. Colum.
Northwestern University Medical School		(1924)	Illinois
Keokuk Medical College, College of Phys. and Surgs.		(1903)	Nebraska
University of Kansas School of Medicine		(1924)	Kansas
Tulane University of Louisiana School of Medicine		(1888)	Texas
University of Minnesota Medical School		(1926)	Minnesota
Barnes Medical College, St. Louis		(1903)	Kansas
St. Louis College of Physicians and Surgeons		(1912)	Arkansas
St. Louis University School of Medicine		(1906)	Illinois
Washington University School of Medicine		(1921)	Missouri
University of Cincinnati College of Medicine		(1924)	Ohio
University of Tennessee College of Medicine		(1916) (1925)	Arkansas Mississippi
Baylor University College of Medicine, Dallas		(1920)	Texas
University of Virginia Department of Medicine		(1918)	Montana

College	ENDORSEMENT OF CREDENTIALS	Year Grad.	Endorsement with
University of Virginia Department of Medicine		(1924)	N. B. M. Ex.

District of Columbia January Examination

Dr. Edgar P. Copeland, secretary of the District of Columbia Board of Medical Supervisors, reports the oral, written and practical examination held at Washington, Jan. 11-13, 1927. The examination covered 16 subjects and included 80 questions. An average of 75 per cent was required to pass. Twelve candidates were examined, all of whom passed. Three candidates were licensed by reciprocity. The following colleges were represented:

College	PASSED	Year Grad.	Per Cent
Howard University School of Medicine		(1926)	76.2, 81.3, 82.5, 85.8
Georgetown University School of Med.		(1925) (1926)	87.2, 86.2, 86.8
Tulane University of Louisiana School of Medicine		(1917)	86.2
Johns Hopkins University Medical Department		(1924)	80.8
University of Maryland School of Medicine		(1914)	81.8
Meharry Medical College		(1926)	77.4
University of Virginia School of Medicine		(1924)	87.1

College	LICENSED BY RECIPROCITY	Year Grad.	Reciprocity with
College of Medical Evangelists		(1921)	California
University of Maryland School of Medicine		(1917)	Maryland
Medical College of Virginia		(1924)	W. Virginia

Book Notices

HISTORY OF PROSTITUTION AMONG ALL THE PEOPLES OF THE WORLD, FROM THE MOST REMOTE ANTIQUITY TO THE PRESENT DAY. Three volumes. By Paul LaCroix, Member of Many Academies and Learned Societies French and Foreign. Translated from the original French by Samuel Putnam. Cloth. Price, $36 per set. Pp. 1749. Chicago: Pascal Covici, 1926.

The author, who was a French journalist, reveals in three large volumes, translated by an American journalist, his conception of the history of prostitution from the earliest times to the end of the seventeenth century. The early history is taken from allusions in the classical writings of Greece and Rome, the latter discussions based as much on romance as on history of the middle ages. Like many other French writers, LaCroix is passionate and has a flair for the romantic. Of particular interest to the physician is that section of the second volume which deals with the introduction of syphilis into Europe and its spread through prostitution to all the peoples of the world. LaCroix chooses to accept the doctrine that syphilis was identical with the plagues of biblical times, perhaps something in the nature of a new exacerbation. He discounts completely the conception that it may have been introduced into Europe by the returning sailors of the Columbian voyages. The volumes are beautifully printed in a limited edition, and constitute a reference work as well as the means of passing many hours in interesting reading. They are, however, suited only to those whose work takes them especially in these fields, and who will be able to view the pronouncements in proper perspective.

SYMPTOM DIAGNOSIS, REGIONAL AND GENERAL. By Wilfred M. Barton, A.M., M.D., F.A.C.P., Associate Professor of Medicine, Medical Department of Georgetown University, and Wallace M. Yater, A.B., M.D., Fellow in Medicine, Mayo Foundation, Rochester. Cloth. Price, $10. Pp. 851. New York: D. Appleton & Company, 1927.

This volume has been prepared by the authors as an immediate aid to the puzzled physician in arriving at a diagnosis of disease. Indeed, the suggestion is made in the preface that the book is to be used as a quick reference while the patient is being prepared for examination or while he is dressing after the examination. It is arranged with special reference to the regions of the body and to the symptoms associated with those regions. For example, the single symptom "headache" occupies the first twelve pages of the book; it is discussed with relation to the portion of the head concerned and the possible disease conditions that might produce such a headache. The work is not readable in the ordinary sense of that term; it is strictly a work of reference, largely in outline form. It is not so much a work of diagnosis as of differential diagnosis, serving largely to suggest to the user the things that he may have overlooked.

TRAITÉ DE PHYSIOLOGIE NORMALE ET PATHOLOGIQUE. Publié sous la direction G.-H. Roger, professeur de physiologie à la Faculté de médecine de Paris, et Léon Binet, professeur agrégé de physiologie à la Faculté de médecine de Paris. Tome XI. Reproduction et croissance. Par. M. M. Léon Binet, H. Busquet, et autres. Cloth. Price, 65 francs. Pp. 496, with illustrations. Paris: Masson & Cie, 1927.

This is a composite production containing chapters on: histogenesis of the sex cells by Champy; sex physiology of the male by Busquet; sex physiology of the female by Vignes; secondary sex characters by Pezard; physiology of pregnancy by Vignes; physiology of the new-born by Binet; physiology of lactation by Porcher; histology of growth by Champy; physiology of growth by Champy and Binet; heredity by Binet, and teratology by Rabaud. As in similar monographs by several authors, the chapters have unequal value; the monograph as a whole is reliable, helpful and fairly comprehensive. The chapters by Dr. Vignes are particularly excellent. Dr. Pezard, who writes on the secondary sex characters, has done much experimental work on the physiology of sex and sex characters, particularly among birds. It is therefore surprising to find that on many points this chapter is not down to date. Dr. Pezard seems unfamiliar with the recent important work in this field by Drs. Moore and Oslund in this country. The other chapters contain valuable references to the world literature on the specific points under discussion. This is volume XI of a large work on normal and pathologic physiology under the editorship of Drs. Rogers and Binet of the Paris Faculty of Medicine. The completed series will constitute a valuable work for reference.

BLACK'S MEDICAL CYCLOPEDIA. By John D. Comrie, M.A., B.Sc., M.D., Lecturer on Practice of Medicine in the School of the Royal College at Edinburgh. Eighth edition. Cloth. Price, $6. Pp. 998, with 507 illustrations. New York: Macmillan Company, 1926.

This volume, now in its eighth edition, has sold more than 60,000 copies. It is an a-b-c guide to medical knowledge, a sort of first aid to the physician who needs ready reference. While it is not a complete work in the sense that some of the larger reference handbooks are, it is much more than a dictionary.

SOCIAL ADJUSTMENT. By Robert Cloutman Dexter, Ph.D., Professor of Social and Political Science, Skidmore College. Cloth. Price, $3.50. Pp. 424. New York: Alfred A. Knopf, 1927.

This volume is an attempt to answer the greatest question of all times; namely, why people go wrong. The answer, as given in the first chapter, is apparently that most of us have little knowledge as to how we should conduct ourselves toward our neighbors, or of the importance of the lives of others in controlling our own. Poverty, it is clear, is one of the greatest causes of dependency and is the result not only of economic factors but also of political, social, religious and similar causes. Dr. Dexter is convinced that private relief agencies have established a system by which public relief agencies will in the future take care of the indigent and the dependent. Much of the volume is devoted to the newer efforts to give the child a proper opportunity to develop along the most suitable lines. A special chapter deals with the problems of old age; others with disease, particularly such as can be controlled by the social scheme. The book is beautifully printed. It is written in a straightforward, narrative style, and is, among all the sociological works of modern times, one of the most readable. An extensive bibliography provides reference to periodic literature, to national organizations in the field of public welfare, and to similar topics.

MANUAL OF CLINICAL AND LABORATORY TECHNIC. By Hiram B. Weiss, A.B., M.D., Assistant Professor of Medicine, College of Medicine, University of Cincinnati, and Raphael Isaacs, A.M., M.D., Instructor in Medicine, Harvard Medical School. Third edition. Cloth. Price, $1.25. Pp. 78, with illustrations. Cincinnati: Cincinnati General Hospital, 1927.

This is another of the many guides prepared for the hospital intern in conducting his work. It begins with an outline for the taking of an ordinary history, and follows with the special history required for neurologic examination. The succeeding sections provide the technics for the laboratory tests associated with body fluids and for functional tests related to various organs. There are also directions for paracentesis, intravenous therapy, skin tests, blood grouping and similar topics, a table of normals in blood chemistry, and of abbreviations useful in recording observations. A section entitled "Therapeutic Measures" records briefly some specimen diets, and other tabulations provide material for estimation of calories and other factors associated with food. The material is practical and well suited to the purpose for which it was prepared.

FOOD, NUTRITION AND HEALTH. By E. V. McCollum, Ph.D., Sc.D., Professor of Chemical Hygiene, School of Hygiene and Public Health, Johns Hopkins University, Baltimore, and Nina Simmonds, Sc.D. (Hygiene), Associate Professor of Chemical Hygiene, School of Hygiene and Public Health, Johns Hopkins University, Baltimore. Cloth. Price, $1.50. Pp. 143. Baltimore, 1925.

This booklet, written primarily for the general public, gives in simple form the fundamental facts that every person ought to have relative to the human diet. It tells what is actually known concerning the vitamins A to D; it points out the importance of mineral salts and of proteins, carbohydrates and fats. It discusses foods of vegetable and animal origin,

and the general question of hygiene of the digestive tract. Several chapters concern scientific reduction of weight, and the book concludes with a system of diet for promoting health, accompanied by numerous suggestive dietaries. The language throughout is simple, the discussions informative and interesting, making the book one that should appeal to every reader, lay or medical. Indeed, one might wish that all physicians were fully conversant with the points covered by this volume.

DIE ZUCKERKRANKHEIT UND IHRE BEHANDLUNG. Von Dr. C. von Noorden, Geh. Medizinalrat-Professor an der Universität Frankfurt a. M., und Dr. Isaac, Professor an der Universität Frankfurt a. M. Eighth edition. Paper. Price, 46.50 marks. Pp. 627, with 30 illustrations. Berlin: Julius Springer, 1927.

Ever since the first "von Noorden" appeared, successive editions have marked the progress of diabetes mellitus. No better evidence of the extent of this progress can be obtained than by a comparison of the 438 pages of the sixth edition of 1912 with the 627 pages of the present volume. Although the general form of the two volumes is the same, the division of discussions shows the effect of the discovery of insulin on all phases of the subject. The theory of the disease, the pathology, the chemistry are interwoven with details of treatment into an encyclopedic whole too massive to grasp except on repeated readings. To review an encyclopedia is a difficult task; one knows that the von Noorden first volume was a real contribution to diabetes; and one notes that the present edition has carried the subject well up to the last minute. The references to the literature are particularly gratifying, since they show a keen appreciation of the real contributions made by investigations in Canada and the United States to the study of this fascinating disease.

IMMUNITY IN SYPHILIS. By Alan M. Chesney, Johns Hopkins Medical School. Cloth. Price, $2.50. Pp. 85. Baltimore: Williams & Wilkins Company, 1927.

The very title of this monograph brings to mind classic controversy. Is the rarity of a second attack of syphilis due to acquired immunity or to incomplete cure of the original infection? What is the nature of the so-called antibodies in syphilis? These and other questions relating to syphilis in man as well as in monkeys and rabbits are discussed in a critical and readable manner. The author is well known by his extensive experiments in immunity in syphilis carried out in collaboration with associates at the Johns Hopkins Medical School, and he is especially fitted to discuss this subject. The volume combines a brief summary of the old views and an extended summary of modern opinion, based on recent investigations, and should be of great interest to students of syphilology.

ANATOMICAL TEXTS OF THE EARLIER MIDDLE AGES. A Study in the Transmission of Culture with a Revised Latin Text of Anatomia Cophonis and Translations of Four Texts. By George W. Corner, M.D., Professor of Anatomy in the University of Rochester. Paper. Pp. 112. Washington: Carnegie Institution of Washington, 1927.

Dr. George W. Corner has prepared this work with the guidance of Dr. and Mrs. Charles Singer, M. Wickersheimer, and others recognized as leaders in the field of medical history. He carries the study of anatomy from the period of the school of Salernum through the twelfth and thirteenth centuries, quoting repeatedly from many little known texts and citing numerous examples of the manner in which modern anatomy became a science. A large portion of the book is devoted to the anatomies of Nicolai and Ricardi Anglici.

ATLAS OF THE HISTORY OF MEDICINE—ANATOMY. By Dr. J. G. de Lint, Lecturer on the History of Medicine at the University at Leiden. With a foreword by Charles Singer. Cloth. Price, $6. Pp. 96, with 199 illustrations. New York: Paul B. Hoeber, 1926.

In this work the author provides a collection of a series of descriptive paintings and portraits illustrating the history of anatomy from the earliest times to the nineteenth century. Accompanying each of the illustrations is a brief text, including a biographic note of the individual concerned, as well as the material illustrated. The book is in every sense a contribution to the subject of illustrations as related to the growth of medical science.

Books Received

Books received are acknowledged in this column, and such acknowledgment must be regarded as a sufficient return for the courtesy of the sender. Selections will be made for more extensive review in the interests of our readers and as space permits. Books listed in this department are not available for lending. Any information concerning them will be supplied on request.

FORTSCHRITTE DER NATURWISSENSCHAFTLICHEN FORSCHUNG. Herausgegeben von Prof. Dr. Emil Abderhalden. Band XII. Heft 4. Die Wirkungsweise abgestufter Keimdrüsenschädigung. Eine experimentelle Studie zur Frage der endokrinen Sexualfunktion. Von med. Dr. Heinrich Viktor Klein. Paper. Price, 12 marks. Pp. 378, with 6 illustrations. Berlin: Urban & Schwarzenberg, 1927.

Experimental studies tending to disprove most of the Steinach claims.

DISEASES OF THE DIGESTIVE ORGANS WITH SPECIAL REFERENCE TO THEIR DIAGNOSIS AND TREATMENT. By Charles D. Aaron, Sc.D., M.D., F.A.C.P., Professor of Gastro-Enterology and Dietetics in the Detroit College of Medicine and Surgery. Fourth edition. Cloth. Price, $11. Pp. 927, with 257 illustrations. Philadelphia: Lea & Febiger, 1927.

New edition with special revision of sections on liver, on roentgen ray and many other topics.

PRACTICAL GASTROSCOPY. By Jean Rachet, M.D., Assistant to the Hôpital St. Antoine, Paris. Authorized translation by Fred F. Imianitoff, D.S.C., B.A., M.R.C.S., Assistant to the Gynecological Research Department, Institute of Anatomy, Brussels. Cloth. Price, $5.50. Pp. 148, with 60 illustrations. New York: William Wood & Company, 1927.

Well illustrated monograph giving special technic and values in diagnosis.

A MANUAL OF GYNECOLOGY. By John Osborn Polak, M.Sc., M.D., F.A.C.S., Professor of Obstetrics and Gynecology, Long Island College Hospital. Third edition. Cloth. Price, $5. Pp. 402, with 157 illustrations. Philadelphia: Lea & Febiger, 1927.

New edition of practical manual with references to newer literature.

URINARY SURGERY. A Handbook for the General Practitioner. By William Knox Irwin, M.D., F.R.C.S.E., Surgeon to Out-Patients, St. Paul's for Genito-Urinary Diseases, London. Second edition. Cloth. Price, $4. Pp. 271. New York: William Wood & Company, 1927.

Outline of surgical technic in urology without illustrations.

ADAPTED GROUP GYMNASTICS. By Lillian Curtis Drew, Director of Department of Corrective Gymnastics, Central Branch, Y. W. C. A., New York City. Cloth. Price, $1.75. Pp. 150, with illustrations. Philadelphia: Lea & Febiger, 1927.

Well presented outline for teachers of gymnastics.

DUDLEY ALLEN SARGENT: An Autobiography. Edited by Ledyard W. Sargent. With an introduction by R. Tait McKenzie, M.D. Cloth. Price, $2. Pp. 221, with portrait. Philadelphia: Lea & Febiger, 1927.

Personal record of an American leader in physical education.

LA VACUNACIÓN CONTRA TIFOIDEA: Conferencia pronunciada en los salones de la junta nacional de sanidad y beneficencia. Por. Dr. J. A. Lopez del Valle. Paper. Pp. 41. Havana, 1926.

EXPOSIÇÃO DE MOTIVOS SOBRE O PROBLEMA DA PROPHYLAXIA DA LEPRA NO ESTADO DE SÃO-PAULO. Por G. H. de Paula Souza. Paper. Pp. 115, with illustrations. São Paulo, 1926.

ORGANISATION ET HYGIÈNE SOCIALES: Essai d'hominiculture. Par Jules Amar, professeur de physiologie du travail Paper. Pp. 692, with illustrations. Paris: Dunod, 1927.

REPORT ON THE HEALTH OF THE ARMY FOR THE YEAR 1925. Volume LXI. Paper. Price, 3s. 6d. net. Pp. 152. London: His Majesty's Stationery Office, 1927.

INYECCIONES SUBCUTANEAS DE OXIGENO. Por el Dr. Adan Cuadra, profesor de pediatria de la escuela de medicina de Granada. Paper. Pp. 45. Granada, 1927.

I TUMORI DELLA GHIANDOLA CAROTIDEA. Per Dott. G. Aperlo e Dott. F. Rossi. Paper. Pp. 115, with 15 illustrations. Milan: Francesco Vallardi, 1927.

THE AMERICAN MEDICAL ASSOCIATION OF VIENNA. Paper. Pp. 248. Vienna, 1927.

GLYCOGÈNE, ADRÉNALINE ET INSULINE. Par M. Jacot. Paper. Price, 35 fr. Pp. 209. Paris: Masson & Cie, 1926.

Miscellany

PRESS COMMENT ON THE WASHINGTON SESSION

As was pointed out in THE JOURNAL a few weeks ago, the Washington Session aroused more important newspaper publicity than has any previous annual session of this organization. This resulted no doubt largely from the timeliness of the issues discussed and from the fact that the President of the United States addressed the opening meeting. Further factors were the relationships to the press established by the Association in recent years and the presence in Washington of representatives of most important American newspapers and news gathering organizations.

Editorial comment on the meeting and on the issues was striking and important. Indeed, editorials continue to appear daily in various parts of the country still referring to the Washington session. The physician has quite certainly not lost prestige but continues to have in greater measure than ever before the confidence of the public.

LIQUOR

Public confidence was most apparent in the reaction of the newspapers to the adoption by the House of Delegates of the suggestion "to draft a bill which shall include an amendment to the Volstead Act to remove the pint in ten days limit." As might be expected, there was nearly three times as much material dealing with this aspect of the work of the convention as with any other. The great majority of the newspapers, from all parts of the country, stood squarely behind the House of Delegates.

The New York *Evening World* of May 18 used no uncertain language:

> The action was taken in executive session and is said to have been by a unanimous vote. This is no more than these physicians should have done.
>
> It should have been done in the open, but it required some courage to do it at all in these days when pussyfooting and hypocrisy are common. There is so much of downright impertinence in politicians and Anti-Saloon League hirelings presuming to determine how a physician shall practice medicine and save human life that it is utterly indefensible.
>
> There are thousands of the best physicians in the country who believe that liquor is not only helpful in the treatment of some diseases but absolutely necessary to the saving of life in some others. These men have a sacred duty. To prohibit them from saving life through fanatic legislation is to commit murder. The murderer in such an instance is the Congress of the United States. Even so, some physicians have boldly declared their intention to prescribe liquor when they deem it necessary, regardless of the law.

On the same date the New York *Herald-Tribune* was more restrained but none the less certain that

> The law, as it stands now, prohibits the medical man from giving his best services to his patient. Congress should give the doctor the chance to carry out the Hippocratic oath, which says: "I will follow that system of regimen which, according to my best judgment, I consider best for my patients and abstain from whatever is injurious."

As a means to do away with what its contemporaries plainly indicated as an abuse, the New York *American* suggested:

> The remedy is to ask Congress to reconsider. On this point the medical profession is justified in becoming active in politics as a unit. When so stirred it can prove that it is a power.

Philadelphia editors expressed views similar to those just quoted, while the Chicago *Tribune* of May 25 voiced the prevailing attitude of the Middle West:

> Law does not restrict the dosage of other medicine available for the practitioner and patient. It comes within the physician's judgment and discretion. This is peculiar law. Volstead and the doctor are supposed to go arm in arm to the patient, and if the doctor prescribes whisky the Volstead Act prescribes how much.
>
> This transparently follows the legal assumption that doctors would make an illegal use of the prescription and release large quantities of liquor for beverage purposes. The medical code of honor is a high one and it governs in most particulars the majority of practicing physicians, but there are prescriptions which satisfy an appetite for stimulants rather than provide medical requirements. The majority of doctors, scrupulous in their practice of medicine, find that their whole profession rests under the legal implication that they must have a dosage given by law, and they resent it, but it is a congenital part of a law which in essence is a denial of judgment and discretion. The Volstead Act assumes that the American people cannot be trusted with their own morals, health, deportment and conduct, being in this respect unique among the supposedly civilized people of the world. It is a part of that to assume that American doctors generally cannot be trusted to prescribe medicine if there is any chance of medicine being used as a beverage.

In the South, the famous old Louisville *Courier-Journal* of May 20 wrote:

> Only the physician is competent to judge whether and how much his patient needs whisky, and it is crass effrontery for Congress or the Anti-Saloon League to usurp his functions. Self-respecting physicians are justly resentful of this usurpation and they would manifest no proper appreciation of their own responsibility if they did not insist on their right and competence to practice their profession and did not rebel against the attempt of any legislative body to practice it for them.

Although other papers through the South were in general accord with the sentiments of the *Courier-Journal*, a note of pessimism was sounded by several of them. This temper was well summarized in these lines from the Lynchburg, Va., *Advance* of May 19:

> As stated, medical opinion is not unanimous upon the question of the value of liquor as a medicine. Congress might take either of the prevailing opinions, act upon it and not be illogical. The attempt to straddle is wrong. Either there should be no restrictions on physicians, as the American Medical Association asserts, or the use of liquor as medicine should be forbidden altogether in conformity with minority but highly intelligent medical opinion.
>
> It is not likely, however, that the law will be changed. Politics rather than logic will rule in the matter.

A closely related attitude to that of complete support of the House of Delegates was whole hearted condemnation of the efforts of the drys. "Mr. Wayne B. Wheeler," said the New York *World* of May 19,

> runs perfectly true to form in his ultimatum to the American Medical Association not to appeal to Congress to remove restrictions on the use of alcohol as medicine. In the first place, he knows more about medicine than the doctors, just as he knows more about ethics than the philosophers, more about human nature than the psychologists and more about the administration of justice than the courts; he is perfectly certain how alcohol should and should not be used to obtain "every therapeutic reaction."

Certain editors took a middle ground, and pointed out that in 1917 the medical profession declared alcohol to be valueless in therapeutics. "But," said the Newark, N. J., *News* of May 20,

> the referendum taken by the journal of the association in 1921, in which more than 31,000 pyhsicians, by 51 to 49 votes in each 100, declared liquor a medical agent of value, had already reversed that 1917 judgment. In the interim the influenza-pneumonia epidemics had shown that in some medical crises alcoholic stimulation of the sick is imperative, far beyond the Volstead Law's homeopathic dosage. In this latest action the doctors properly are not so much concerned with the question whether whisky is a disease specific as with their professional right to practice their calling according to their training and experience.
>
> That the doctors have blood in their eyes as to this business is made apparent by their simultaneous determination to demand control of patent medicines, which are largely alcohol. They make the point that these are illegal, under the law as it stands, wherever the spirit content is as much as one-half of one per cent. While legitimate medical practice is restricted to a driblet, the open door to this sort of flood is a fitting commentary upon the sanity of prohibition enforcement.

An occasional paper was not convinced that experience under the Volstead Law justified freedom in prescribing. The Milwaukee *Journal* of May 22 expressed some distrust:

> Congress has no business telling doctors what quantity of alcohol is sufficient for treatment. But, on the other hand, a doctor has no business prescribing alcohol to an obviously well person. And some doctors unquestionably have done just that.
>
> In some circles liquor scripts seem to have been considered more in the light of their equivalent in legal tender than in the light of their value in the treatment of disease. Men who "wanted to have a little something in the house in case of illness" have been accommodated. Doctors are doing less of this accommodation than formerly, it is understood. They have long since grown weary of the impositions of friends. But the powerful medical associations seemingly have done little to discourage this thing.
>
> The "pint-in-10-days" measure is an unwarranted interference with the conscientious physician who looks upon liquor as a real therapeutic agent. But one cannot be blind to the abuse which led to the writing of the prescription by Dr. Congress.

A corollary of this attitude was that expressed in the New York *Telegram* of May 20:

The Volstead Act went too far when it sought to control the legitimate practice of medicine. So long as prohibition is the law of the land, however, there is reason in enough regulation to prevent charlatans from abusing their privileges as physicians and becoming, in effect, bootleggers.

The Wheeling, W. Va., *Register* of May 21, under the title "Doctors Shouldn't Misplace the Blame," distinguished between the authority of Congress and of the Supreme Court:

To decree that a physician competent to be entrusted with care of the sick may not prescribe for a patient needing stimulation more than one pint of whisky in ten days is quite obviously a foolish use of the statutory power. But it is no part of the duty of the Supreme Court to save this nation from folly. Its function is to pass, not upon the wisdom but upon the constitutionality of laws.

The instances of qualified approval and partial disapproval were few. A slightly larger number were definitely against removal of the restriction. The papers represented in this body of unfavorable opinion include the Mishawaka, Ind., *Enterprise*, May 25; Statesville, N. C., *Landmark*, May 19; Owensburg, Ky., *Messenger*, May 19; Sterling, Ill., *Gazette*, June 1; Clarksville, Texas or Tenn., *Chronicle*, May 18; Bluffton, Ind., *Banner*, May 19. Five papers, from small communities in Indiana, Mississippi and Michigan (Union City, Ind., *Times*, May 26; Rushville, Ind., *Republican*, May 21; Madison, Ind., *Courier*, May 27; Hattiesburg, Miss., *American*, May 26; Battle Creek, Mich., *Enquirer News*, May 23) have apparently reprinted a syndicated artcle. Thus, the Peoria *Journal* of May 17 concluded its editorial with the two following paragraphs:

The layman is under no delusion as to "prescription" whisky. He knows that the physician who "prescribes" it is merely using his legal authority to collect $3 for writing his name on a blank furnished by the government. The "patient" would take no greater chances if he paid his money directly to the druggist or to the messenger boy who makes delivery.

If the American Medical Association hopes to denaturize the Volstead act of its hypocrisy, it is undertaking a herculean task. The real law enforcers are opposed to whisky for all purposes—beverage, medicinal and industrial. Opponents of the Volstead act, on the other hand, are fighting it on all grounds. In the meantime, "prescription" whisky, having been a fake from the beginning, can scarcely be raised in honor by an ancient and noble profession.

One wag, on the Nashville, Tenn., *Banner*, is not worried by the controversy. Perhaps the nearness of Appalachian fastnesses has kept him mellow. On May 20, he wrote:

The members of the American Medical Association in Washington are said to have been considering the matter of liquor behind closed doors. Well, that's the general custom of the country, isn't it?

PRESIDENT COOLIDGE

Next to the liquor question, the press seized most eagerly on the convention address of President Coolidge. The mass of material taken from this address and selected for editorial comment was great; much of it, it seems, was obtained from syndicates. As a general summary, apparently independently written, the Trenton, N. J., *Gazette* of May 19 printed the following, under the title "Medical Values":

A notable tribute to the physicians of the land was paid by President Coolidge in his address before the American Medical Association. Without giving expression to fulsome praise, the President called atention to the high ethical standards which maintain throughout the profession and which are contributing so markedly to the quest for social perfection.

Here are a few of the professional qualities to which Mr. Coolidge pointed: Service, open-mindedness, heroism, cooperation, tolerance and progressiveness. And, as for the altruism of medical men, he declared that they are uniformly willing to serve the interests of human welfare even when such action diminishes the income to be derived from their practice.

The President's observations will commend themselves to thoughtful people everywhere. Members of the medical profession, owing to self-imposed restrictions, usually disdain the plaudits which their services to humanity merit. The general practitioner, as well as the laboratory expert, normally fails to receive the public acclaim which is his just due.

And so, a pleasing element of equity is contained in these remarks of Mr. Coolidge. Indeed, here is a body of scientists which, as the President noted, may well make large contributions to world regeneration, "physically, mentally and spiritually, when not force but reason will hold universal sway." In voicing this thought, the White House was speaking for America at large.

The Indianapolis *News* requoted the tributes paid by the President and concluded:

We know of no other group of men who have deliberately set out to destroy the demand for their services. By preventing illness through public spirited work for sanitation and hygiene among all people they have reduced the scope of their practice. This is in keeping with their vows as men of science and ministers to the needs of the suffering without regard for their own personal welfare. The tribute paid to them and their calling by the President was well deserved. It is felt by every citizen, who has—or should have—a keen sense of obligation to the school which in recent years has added twenty years to his expectation of life.

A syndicated editorial appearing in many newspapers of the Middle West, including the Gary (Ind.) *Post-Tribune*, the Newcastle (Ind.) *Courier*, the Riverdale (Ill.) *Pointer*, and others, concluded:

Thus the community owes a big debt to its physicians. There are several ways in which we can do something to pay it. Many doctors charge little to people of limited means and that generosity is no doubt abused. If a person can by any possible effort pay his doctor's bill he should certainly do so and work a little harder to avoid being the recipient of this form of charity.

If one could look through the books of the average doctor he would find many accounts due from people who are perfectly able to pay, but fail to do so out of neglect and indifference.

The New York *Sun* emphasized the increasing span of life due to the work of medical science:

How nobly the doctors have been changing the notions of humanity as to youth and age is shown by the simple fact that Molière, who died at 51, thought that a man was getting well along in years at 30, an age at which most moderns think themselves rather young to marry.

Comparing the practice of medicine with that of law, to the disadvantage of the latter, the New York *Telegram*, after pointing out the increasing number of laws on the statute books, said:

It would be much the same if young physicians got busy after graduation inventing new diseases or finding new germs, microbes and bacilli with which to infect the human race, so as to make more business and more money for physicians.

If President Coolidge gets a chance to address the American Bar Association he might render a public service by inviting attention to the noble example set by the medical profession in their advocacy of prevention.

Newspapers everywhere endorsed all the kind sentiments relative to the medical profession expressed by the President, and the Flint (Mich.) *Journal* answered well for them:

The medical men present knew every fact and every bit of statistics President Coolidge quoted, but this semi-official speech of appreciation, expressing the thanks of the nation for the services of its great army of physicians, must have been cheering to those who carry on the health work day by day, too often with small thanks for their effort.

MEDICAL ECONOMICS

Judging from space used by the newspapers, the public is next most deeply interested in the cost of sickness as presented by President Jackson. Again the syndicated article found favor. One of these entitled "Paying the Doctor," which appeared in several of the large papers in various parts of the country, is printed herewith:

In this day of tonsils and adenoids, paying the doctor has become one of the greatest problems in the life of the average salaried man.

The American Medical Association has recognized the burden that the wage earner has to bear and its president, Dr. Jabez North Jackson of Kansas City, has just issued an appeal for endowment of hospitals for what he calls the great middle class.

Doctors have three kinds of patients: charity, very rich and those that pay their fees on the instalment plan.

The charity patients receive medical attention free, it being considered humanitarian for the medical men to volunteer their services to public and charity institutions.

The wealthy clients pay fees in keeping with their incomes, thus making up to the physician for the time and expense of caring for his free patients.

Those that pay on the instalment plan are the wage earners, too proud to accept free medical attention, who go into debt and pinch themselves to meet the doctor's bills as well as the bills of the hospitals and the nurses.

Being ill is a rich man's luxury or a poor man's paradise, but for the middle man it is a financial calamity.

Hospital fees have become so great that only a rich man can afford to pay them. The poor man is protected because philanthropists have endowed institutions to provide him with the proper care and attention during illness.

Only the salaried wage earner has been neglected and he must go to the rich man's hospital, pay the rich man's rates and saddle himself with debt in order to get relief.

Not only this: whenever he pays taxes he is paying for the medical upkeep of the poor, for part of this money is used in keeping up hospitals, clinics and other public health institutions.

Whether you call him a wage earner, or a middle man, he does need help and we are glad to see that the American Medical Association is starting a movement for those who aren't rich or poor enough to afford to get sick.

PUBLICITY

Although the public has complained of the hardship involved in paying for medical service, it has not in general resented the fees imposed. It has, however, resented the reticence of the medical profession. Accordingly, a number of newspapers welcomed the address of President Phillips, on which the Asheville, N. C., *Times* commented as follows:

Without the least modification of its code against personal publicity, President Wendell C. Phillips of the American Medical Association urges the membership to throw off its mask of reticence and its shrinking attitude toward reasonable publicity concerning public health education. Dr. Phillips asserted that the physician has no right to conceal from the nonmedical public the great body of news of first importance which the doctor can communicate. To carry out the purpose proposed, he recommended that the association organize a department of field activity in public health education.

On the same subject, "Uncle Dudley," writing in the Boston *Globe* of May 18, declared:

The old tradition was founded upon reason, because the tremendous majority were not sufficiently schooled to understand the theory and practice of healing. The spread of education and of the scientific spirit has created a necessity for a new attitude which will make the physician leader in the quest for health. Part of his task is to let people in on secrets.

COSMETICS AND "PATENT MEDICINES"

Although the Winchester, Va., *Star* of May 23 contained an article entitled "Let Them Paint," the Philadelpha *Ledger* of May 18 stated the general agreement with the attitude of medical men toward cosmetics as follows:

The resolution pending before the American Medical Association proposing that the federal Pure Food and Drugs Act be extended to cosmetics is offered, according to its proponents, to put an end to the use of poisonous and deleterious applications designed to beautify the skin and remove, restore or change the color of the hair.

The Lynchburg, Va., *News* of May 20 printed a novel interpretation of the Association's fight against "patent medicines." Said this journal:

It is very likely that in many cases medical preparations containing large quantities of alcohol are intended for beverage consumption.

It would be a very bad idea, however, for Congress to attempt to determine what percentage of alcohol is or is not necessary for a medical preparation. That is quite as wrong as for Congress to fix the amount of spirituous liquors that a physician may prescribe. The fact that the doctors are occupying both sides of the fence cannot escape notice.

The Valdosta, Ga., *Times*, however, believed that the inconsistency lies elsewhere; namely, in the work of the Anti-Saloon League:

Yet it seems that even this dominating and unbending league can compromise its principles at the demand of expediency. It is highly interesting to find the indignant physicians in convention accuse the Anti-Saloon League of countenancing "intoxicants disguised as patent medicines," now flooding the country, some with alcoholic content up to 25 per cent, because these are "consumed in great quantities" in "many strong dry districts," and much dry support would be alienated by hostile move against these "comforting" liquors in disguise. The sick may suffer, but "dry" drinkers must be served! Though Wayne B. Wheeler virtually accuses the physicians of lying, the medical men are provided with a very pointed "comeback."

Not only is the evidence of public trust in the medical profession pleasant to note, it also is gratifying that the public wishes to be informed about the deliberations of the yearly assembly of medical men. Newspaper space is not easily obtained, and the annual session has never before had so large a share of it.

Purposeful Activity Increases Efficiency.—The children of a school class may work with doubled efficiency simply from learning the significance of the work to their wants, and associating the work with sociability, cheerfulness and achievement.—Thorndike: Educational Psychology **3**:128.

Medicolegal

Making Most of Physician's Appointment by Court

(Meek v. Wheeler, Kelly & Hagny Inv. Co. (Kan.), 251 Pac. R. 184)

The Supreme Court of Kansas says that in this action under the workmen's compensation act error was predicated on the fact that a physician was permitted to testify that he had made an examination of the plaintiff at the direction of the trial court itself, and because the defendant's counsel argued that fact to the jury as one of special significance tending "to give his evidence greater weight than would otherwise be accredited, and to minimize the weight of other physicians and evidence in the case." But this assignment of error lacked merit. There is a provision of statute (revised statutes of Kansas, 44—516) which indicates a legislative belief that expert witnesses called by the respective litigants may possibly be somewhat biased in their views and that the views of a neutral physician called by the court and under no obligation to either litigant might be helpful in ascertaining the truth touching actual or simulated injuries and incapacity in industrial accident cases. The relative amount of credence to be attached to the testimony of any expert witness, whether avowedly partisan, presumably neutral or manifestly disinterested, like the testimony of any other witness, is a fair subject for debate in addressing the jury. In other words, in an action under the workmen's compensation act, it was proper for the trial court to appoint a neutral physician to examine the plaintiff's physical condition, and it was not erroneous for such physician to testify, among other matters, that he had been appointed by the court, nor for counsel to argue to the jury their views touching the weight and credence which might be given to his testimony because of such appointment.

Damages for Mental Anguish Held Suffered by Child

(Illinois Cent. R. Co. et al. v. Williams (Miss.), 110 So. R. 510)

The Supreme Court of Mississippi, division B, says that the plaintiff when 2 years and 8 months of age was injured by the alleged negligence of the defendant railroad company. His skull was fractured on the left side near the top of the head. A surgical operation was performed in which a piece of the skull about 2 inches long and of the width of two fingers was removed. A small particle of brain came out. The child's mother and father testified that his recovery seemed complete, and that he was more robust and apparently in better health than he was before his injury. The only evidence of physical suffering testified to by them was that he was restless at night, and sometimes would put his hand up to his head and say that his head hurt him. The surgeon who performed the operation testified at the trial, which took place a little less than two years after the injury, that the child appeared to be in good physical condition—In fact, that there had been a complete recovery from his injuries. The trial resulted in a judgment for $20,000 damages, which the court holds was excessive and should be reduced to $15,000.

An instruction given the jury told it that, if it found for the plaintiff, in assessing damages it should take into consideration, among other things, "any mental and physical pain and suffering which the testimony may show he has endured or will endure, if any, as the proximate result of the negligence of the defendant." The defendant contended that a child 2 or 3 years of age could not endure mental anguish, and therefore the instruction authorizing as an element of damages mental anguish already endured was error and misleading to the jury, and probably influenced the verdict. The defendant based its argument on the definition of mental anguish given by the Texas court in *Railroad Company* v. *Miller*, 25 Texas Civ. App. 460, 61 S. W. 978. That court held that mental anguish, for which recovery might be had in an action for personal injuries, included not only the mental sensation or pain resulting from the physical injury, but also the purely mental suffering experienced by

the injured person in contemplating his crippled condition and brooding over his future prospects. The defendant said that the evidence in the instant case showed that the plaintiff was of such tender years and immature mind that he was incapable of contemplating his crippled condition and brooding over his future prospects. That was doubtless true, but the instruction in question did not so define mental anguish. According to the Texas court, that is only one of the elements of mental anguish. Certainly it is true that, regardless of how immature a child is, it is capable of suffering mental pain as the result of physical injury. Mental anguish in some degree necessarily follows physical pain. A child, though incapable of reasoning, will cry out as the result of physical pain. Mental anguish exists whether the child can recognize it and reason about it or not. This court thinks that the instruction criticized by the defendant embodied the correct principles of law.

Not Liable for Abscess After Hypodermic Injection

(Sheehan v. Strong (Mass), 154 N. E. R. 253)

The Supreme Judicial Court of Massachusetts says that two separate actions in tort were brought by Mrs. Sheehan and her husband to recover for injuries alleged to have been received by her at the private hospital of the defendant in consequence of the negligence of a nurse in his employ. The woman's family physician had engaged a bed for her in the hospital and arranged with a surgeon to perform a gall-bladder operation. Three days after the operation an abscess formed on the right thigh of the patient at a place where an injection of solution of pituitary had been made. She testified that during the night following the operation, and while the ward she was in was dark, she felt the nurse rub her thigh with some cold substance and then insert a needle into a different spot from where the cold application was made, and that the nurse seemed to be in a hurry in the manner and method of making the injection. She testified further that she believed that this injection caused the abscess. The question was whether there was any evidence warranting a finding of negligence if it was assumed that the defendant was responsible for the carelessness of the nurse in administering the injection. The defendant offered evidence tending to show that the room was well lighted, that the injection was not hurriedly made, that the place where the needle was inserted was properly sterilized, and that the injection in all respects was properly administered. Considering the evidence in the light most favorable to the plaintiff, the court is unable to find any evidence that would warrant a finding of negligence. There was no evidence that the hypodermic needle used was infected, or that the abscess was due to an infection. The surgeon who performed the operation testified that he did not know what caused the abscess; that if the skin had not been properly washed he could not say that it was the cause, but that it might be. He testified further that he would not go so far as to say that the abscess was probably caused by failure to wash the skin, that it might have been caused by a condition of the skin of the patient, or that the solution injected might have been unsterile when it came from the manufacturer. On cross-examination he said that if the needle was properly sterilized, but the place where it was inserted was not washed or cleaned, it would not necessarily lead him to believe that an abscess would form. There was other evidence offered by the plaintiff tending to show that she had jaundice and diabetes, and that an abscess would be more likely to develop if a person was suffering from the latter disease. Although several physicians testified, none were able to express an opinion as to what caused the abscess. In these circumstances there was nothing to show that any act or omission of the nurse resulted in the formation of the abscess. Its cause was wholly a matter of conjecture and speculation without evidence to support a finding of negligence on the part of the nurse. It followed that the defendant's motion for a directed verdict in each case should have been allowed, and exceptions to a denial of the motion must be sustained; besides, judgment might be entered for the defendant.

Society Proceedings

COMING MEETINGS

Montana, Medical Association of, Missoula, July 13-14. Dr. E. G. Balsam, 222 Hart-Albin Building, Billings, Secretary.

ASSOCIATION OF AMERICAN PHYSICIANS

Forty-Second Annual Meeting, held at Atlantic City, N. J., May 3 and 4, 1927

(Continued from page 2050)

Cardiac Pain in Rheumatic Fever

DR. HOMER F. SWIFT, New York: In a study of painful cardiac symptoms in rheumatic fever, two thirds of the patients showed concomitant evidence of cardiac involvement, and one third showed evidence later on. Pain in the acute attack was evidence of permanent cardiac injury. These studies give indication that when pain does occur the physician should treat the patient as though carditis were present.

The Sensibility to Pain of the Pericardium

DR. JOSEPH A. CAPPS, Chicago: There is an impression that pain is the most characteristic symptom of pericarditis, but MacKenzie was impressed by the absence of pain in pericarditis without traces of pleurisy. We touched the serous pericardium and sac round the heart through the fourth interspace. There was no pain. When entry was made through the fifth interspace, there was pain in the phrenic nerve region of the neck. Four clinical groups were studied: (1) pericarditis; (2) dry pericarditis, (3) cases of coronary thrombosis and (4) cases of pleurisy. Large pericardial effusion caused respiratory distress, but no pain. Pleural pericarditis caused sharp pain increased by respiration.

DISCUSSION

DR. HENRY A. CHRISTIAN, Boston: Clinically, terminal pericarditis rarely gives pain. In rheumatic pericarditis, pain is evident. There is an idiopathic, acute, nonrheumatic type with sudden onset of severe pain in the abdomen, which is frequently mistaken for a surgical condition. The pain is often very severe and continues as long as the persistence of the pericarditis. The patients recover, often without subsequent evidence of a lesion. The type last mentioned presents considerable diagnostic difficulties unless auscultation is carried out. If careful diagnosis is not made, frequently a useless operation is done.

DR. THOMAS R. BOGGS, Baltimore: I can confirm the observations of Dr. Capps in regard to the pain in perforation. In a case of pulmonary neoplasm with an enormous amount of fluid, a puncture was made near the nipple. When the needle was passed into the puncture, the only points at which the man expressed any feeling of pain were in the region Dr. Capps mentioned.

DR. L. G. ROWNTREE, Rochester, Minn.: I should like to inquire as to seasonal variations, as to the incidence of dyspnea, and as to abdominal reference of the pain. Absence of pain is one of the most striking symptoms in pericarditis, dry or moist, but without pleural involvement.

DR. HOMER F. SWIFT, New York: The incidence of rheumatic fever shows definite seasonal variation. It is highest from February to May, when it begins to drop. In severe cases the incidence of dyspnea depends on the underlying cardiac involvement. The reference of the pain to the abdomen has not been marked. As to the relation of pain to pericarditis, there can be pericarditis without pain, and in other cases there is pain before the pericarditis; hence I feel that the pain is not an indication of the severity of the underlying process. I have seen much permanent heart injury from the pericarditis cases. Only two patients escaped chronic valvular disease.

DR. JOSEPH A. CAPPS, Chicago: There is frequent occurrence of pain in association with pericarditis in rheumatic patients, with a lack of pain in the terminal conditions. I would suggest an explanation. It may be that in rheumatic

carditis we find frequent association with pleurisy, with mediastinitis and involvement of the parietal pleura. In terminal infections, such as nephritis, involvement of the pleura is not so frequent.

Case of Heart Block with Frequent Attacks of Stokes-Adams Syndrome

DR. JAMES D. HEARD, Pittsburgh: This patient suffered with increasing dyspnea, with attacks of mental confusion. He was treated with barium chloride, from 30 to 120 mg. daily, without avail. Studies of the heart one hour after death showed very marked fibrosis with compression of the bundle fibers, and fatty infiltration of the bundle of His.

Occurrence of an Unusual Form of Gallop Rhythm

DR. LEWIS A. CONNER, New York: The cases are usually of very short duration. The shock is very marked. The time of the diastolic sound is immediately after the first heart sound. Ten cases were seen. In four it was quite unexpected, occurring in advanced mitral disease. The gallop appears with the beginning of improvement and disappears with its progress. Two patients came back with recurrence of the symptoms. In four cases it was associated with rheumatic heart without signs of failure. One patient had coronary thrombosis. The sound is quick and sharp, and can be seen along the diaphragm. It was occasionally noted with fibrillation. One patient had slow regular rhythm with fibrillation, the slow rhythm probably being a factor. The most interesting change occurring was in the case of hypertension. The location was near the region of the apex. Potin, in 1885, described one case associated with adherent pericardium. The explanation is that it is due to exaggeration of the normal third heart sound.

DISCUSSION

DR. WILLIAM S. THAYER, Baltimore: I have been interested in the prediastolic gallop. I think it is commonest in adherent pericardium in acute myocardial disease, in dilated hearts and in aortic insufficiency. The Flint murmur is a loud, early diastolic sound, a little inside the apex of the heart. I think electrocardiograms, when a very exaggerated third sound is heard, are indicative of a grave state of the myocardium itself and are of serious clinical significance. In two cases in which the sound was loudest near the apex of the heart there was a very grave prognosis.

DR. S. A. LEVINE, Boston: Dr. Heard made us think that medication would be hopeless in his case, but there have been cases reported in which barium chloride had a valuable effect on the syncope, though not on the heart failure. Barium chloride would be of use for the syncope itself. His case was complicated by heart failure; but without that symptom barium chloride has a definite place in therapy.

Extensive Spontaneous Thrombosis of the Small Branches of the Pulmonary Artery

DR. CHANNING FROTHINGHAM, Boston: A woman, aged 38, with negative history, had had an attack of shortness of breath six months previously, when she had a cold. Then she improved. Later another cold occurred, with shortness of breath. On admission, the physical examination was negative. On slight exertion there was cyanosis. There was no polycythemia. Liver tests were negative. Roentgen-ray examination showed slight enlargement of the heart. The electrocardiogram did not show anything. The vital capacity was 53 per cent. On the morning of death, the patient was very cyanotic, with the picture of pulmonary embolism. Autopsy showed multiple thrombi scattered through the smaller branches of the pulmonary artery going to the periphery of the lung; slight hypertrophy of the right side of the heart; moderate passive congestion of the liver, spleen and kidneys; slight arteriosclerosis; thrombosis of the hemorrhoidal vein; a small fibroid of the uterus; ulceration of the cervical canal, and slight arteriosclerosis of the pulmonary artery. Some areas were fibrotic, with giant cells and stellate forms. We did not connect these lesions with the multiple thrombosis. In the thrombi, small vessels were working through, showing that the condition was one of long standing. In certain vessels there was a compensatory endarteritis. The cause of the thrombi was not clear.

DISCUSSION

DR. HOMER F. SWIFT, New York: Were the other organs of the body explored carefully for Aschoff bodies? Von Glahn and Pappenheimer described lesions that on superficial examinations looked like thrombosis, but on examination were found to be definite inflammatory lesions of the vessel wall. Their pictures resemble these illustrations very closely.

DR. AUGUSTUS WADSWORTH, Albany, N. Y.: These lesions look like cases of thrombosis and endarteritis which I have described in rheumatic lesions.

DR. A. S. WARTHIN, Ann Arbor, Mich.: These lesions look to me like those in Chiari's disease of the liver, extending into the vena cava.

DR. WILLIAM H. WELCH, Baltimore: Some of the infarcts were anemic necrosis, and some were hemorrhagic. Some of the arteries were occluded without any disturbance in nutrition. Anemic infarcts would show extensive thrombosis of the pulmonary arteries.

DR. CHANNING FROTHINGHAM, Boston: The arteries elsewhere in the body seemed to be in an excellent condition, except for a few areas of focal sclerosis in the liver. Arteriosclerosis in the lung was shown, but there was no appreciable amount of disease in the wall of the lung.

Experimental Thrombosis

DR. L. G. ROWNTREE, Rochester, Minn.: Six or seven per cent of the surgical deaths in Rochester are due to pulmonary embolism. We have tried to avoid these accidents and we believe we have reached a regimen that is effective. We find that heat hastens coagulation time, and cold retards it. To prevent clotting we used heparin, which is an antithrombin. Coagulation is much delayed thereby and clots form slowly, but there is no thrombosis. In jaundiced animals, there was great formation of white thrombi but no fibrin. With many platelets, and without fibrin formation, the blood continued to circulate. Thus it is possible to prevent fibrin formation.

Polycythemia in Feather Dyers

DR. EUGENE S. KILGORE, San Francisco: In July, 1919, there died in the University of California Hospital a German feather dyer, aged 61, who showed clinically a high red count (up to 8,000,000), considerable cyanosis of the nose and ears, palpable spleen, some fibrosis of the apex of the right lung, and, terminally, severe substernal and precordial pain. At autopsy we found erythroblastic hyperplasia of the marrow of the long bones, coronary thrombosis, chronic myocarditis, splenic and renal embolism, and fibrous tuberculosis of the right apex. Two years previously the cyanosis and other physical features were the same but the blood examination was not remarkable. Before his death there came to visit him his assistant in feather dying, a woman, aged 39. Her red cells at one time numbered 12,400,000. She improved following irradiation and benzene treatments.

DISCUSSION

DR. WILLIAM C. STADIE, Philadelphia: Was there any appearance of pulmonary fibrosis in these cases?

DR. BAILEY K. ASHFORD, Porto Rico: In Porto Rico, in the negroes, in the treatment of uncinariasis, followed by excessive anemia, the return of the blood to normal is often followed by an overproduction of red cells. This would seem as if nature, as so often happens, attempts to correct the previous lack by an overcompensation. Thus the mechanism of polycythemia may be in the nature of correction of a previously existing anemia.

DR. EUGENE S. KILGORE, San Francisco: There was a small area of fibrosis in one lung, but not sufficient to have caused any marked effect.

Feeding Whole Liver or an Effective Fraction in Pernicious Anemia

DR. GEORGE R. MINOT, Boston: The story of forty cases of pernicious anemia shows that after the feeding of liver (usually 200 Gm. a day) or a certain fraction of it, there occurs with extraordinary regularity a prompt, temporary, often marked increase of the reticulocytes, followed by a

rise of the red blood corpuscles, which almost always continues to normal. Kidneys fed to one patient produced similar results. A diet rich in fat does not inhibit the response of the reticulocytes. Raw liver pulp may perhaps cause a greater increase of these cells than an equivalent amount of cooked liver. The behavior of the reticulated red blood cells sugests that liver stimulates maturation of the megaloblasts that crowd the bone marrow in relapse. In secondary anemia the bone marrow does not contain masses of megaloblasts, and a liver diet does not produce a significant increase of reticulocytes. In comparable cases of pernicious anemia the rise of the reticulocytes tends to occur sooner and to be more marked, the greater the amount of effective liver substance fed. The reticulocyte increase is approximately inversely proportional to the height of the red blood corpuscle count. This is to be expected because there are few megaloblasts in the bone marrow when the count of the red blood cells is relatively high. When the count was about one million per cubic millimeter, the reticulocytes increased to between 11 and 50 per cent, and when it was in the vicinity of three million their percentage increase was small. Rarely, a case may show a relatively slight and delayed response of the reticulocytes, which indicates a less desirable prognosis than usual. The nature of the material effective in pernicious anemia is being investigated by studying the influence of feeding fractions of liver. The occurrence or absence of a response of the reticulocytes has given information within nine days after a fraction was fed as to whether or not it was of value. A nonprotein, ether insoluble, alcohol precipitable fraction of beef liver has been isolated, which has caused in each of eight cases a prompt, marked, temporary increase of reticulocytes and a rapid rise in the numbers of red blood cells. Two patients produced at least 750 Gm. of red blood cells in fifteen days while taking about 200 Gm. of this effective fraction. For beneficial results the patient is required to take daily only 10 Gm. of the substance. An adequate, well balanced diet should also be prescribed.

DISCUSSION

DR. W. C. WHITE, Pittsburgh: Has any attempt been made to estimate the fraction that might be in the Kupffer cells of the liver? We found that a perfusion of the lung had a tremendous effect on the reticulated cells. It had an effect like splenomegaly. Perfusion of the liver might give rise to an effect on the reticulocytes. I believe, however, that we should revise our terminology in regard to some of these elements of the blood. The use of the word reticulocyte is especially misleading.

DR. BAILEY K. ASHFORD, Porto Rico: In the so-called pernicious anemia following sprue, we have used liver treatment with excellent results in a small series of cases.

DR. HENRY A. CHRISTIAN, Boston: It is interesting to have watched the enthusiasm accorded to various forms of treatment that have arisen. This is the first type of treatment that to my mind justified the enthusiasm of its advocates. The reasons are these: It is easily applied; it has always worked, and the improvement in the clinical appearance is even more striking than the charted rise in the reticulocytes and the later rise in the red cell count. This treatment has best stood the clinical test in twenty-two years of experience.

Unusual Types of Hemorrhagic Disease

DR. H. Z. GIFFIN, Rochester, Minn.: I have seen five unusual types of hemorrhagic disease: 1. A case of splenic anemia and hemorrhagic purpura which developed simultaneously; cure followed splenectomy. 2. Severe hemorrhagic disease in women, through four generations, with high platelet level, long prothrombin time, but normal coagulation time. 3. Severe hemorrhagic disease, presenting the features of hemorrhagic purpura, except for thrombocytopenia; improvement occurred with splenectomy. 4. Severe hemorrhagic disease with very high viscosity of the blood, the platelet level being low and viscosity 31. There was very severe bleeding. The patient was a missionary who came from Thibet. Coagulation time was prolonged and prothrombin moderately prolonged. Albumin was 22 per cent and globulin 78 per cent, a reversal of the normal ratio. 5. Familial epistaxis with telangiectasis, and low platelet level.

Hypertensive Encephalopathy

DR. B. S. OPPENHEIMER, New York: There are many acute cerebral upsets, such as convulsions, transient aphasias, hemiplegias, sudden deafness, and amauroses which are related to states of hypertension. We have termed this encephalopathy. A boy, aged 19, who was twenty months in the hospital with marked hypertension after pneumonia but without evidence of disturbed renal function, had violent cerebral convulsive attacks, associated with rise of blood pressure, somewhat analogous to toxemia of pregnancy or acute lead poisoning, not due to disturbance of renal function but rather to some local cerebral change, perhaps sudden arterial contraction, producing sudden edema. Probably vasoconstriction is the primary cause and edema is secondary.

Relation of Acute Infection to the Onset and Progress of Glomerular Nephritis

DR. WARFIELD T. LONGCOPE, Baltimore: We have investigated the association of acute infection with the onset of glomerular nephritis and the association of acute infection with the progress of the nephritis. Forty cases have been studied of acute and subacute glomerular nephritis in persons under 30 years of age. Many were studied in detail. Thirty-four cases were associated with acute infection. Tonsillitis occurred in highest proportion in these cases, and 81 per cent were associated with *Streptococcus hemolyticus*. Ten patients recovered, with subsidence of the infection. Three patients died from persistence of the infection. In 83.3 per cent of the cases of nephritis which have progressed or remained stationary the infection has persisted, or the organism has persisted in the pharynx. The alpha and beta types of *S. hemolyticus* produce toxic filtrates in large amounts. There is no evidence that *S. hemolyticus* produces nephritis by direct infection of the kidneys, but patients become highly susceptible to the toxins.

DISCUSSION

DR. C. P. EMERSON, Indianapolis: Has any particular attention been paid to the site of the operation which was followed by acute exacerbation? In our practice we have stipulated to the tonsil men that they are allowed only two minutes for the removal of the tonsils, thus avoiding as much as possible trauma of the tissues with spread of the infection. When this program has been strictly carried out we have had no trouble with subsequent infection of the pharyngeal tissues.

DR. HOMER F. SWIFT, New York: Were any studies made of the antitoxic capacity of the blood in these cases? In a person harboring toxins, when the organism persisted, we found that there was a demonstrable amount of antitoxin produced in the serum.

DR. A. R. DOCHEZ, New York: A great deal of interest attaches to the nature of the so-called antitoxin in these cases. The term is used somewhat loosely. Most bacteria give off substances that produce reactions in the skin. Diphtheria toxin produces an acute reaction in the skin. Some of the substances are readily neutralizable, as for instance, diphtheria, which can be neutralized by serum. Tuberculin cannot be neutralized by any serum. Although these studies are incomplete on these substances, which may be single or consist of more than one substance, there should exist a degree of neutrability which varies from the status of diphtheria antitoxin to substances more tuberculin-like in nature. Until there is better understanding as to what is meant by soluble bacterial toxins, it is difficult to estimate their neutralizability.

DR. WARFIELD T. LONGCOPE, Baltimore: In answer to Dr. Emerson, we have waited until the acute phase has subsided before operation was performed, but in some cases a necessary tonsillectomy or adenectomy was done promptly. In operations which are more protracted, such as drainage of a sinus, there is often exacerbation, but there was none after tonsillectomy unless there was secondary infection. We have done some work in trying to neutralize the toxins with the serums of the patients, but not enough to justify conclusions. In one instance we thought we obtained neutralization.

(To be continued)

Current Medical Literature

AMERICAN

The Association library lends periodicals to Fellows of the Association and to individual subscribers to The Journal in America for a period of three days. No foreign journals are available prior to 1921, nor domestic prior to 1923. Periodicals published by the American Medical Association are not available for lending, but may be supplied on order. Requests should be accompanied by stamps to cover postage (6 cents if one and 12 cents if two periodicals are requested).

Titles marked with an asterisk (*) are abstracted below.

American J. of Med. Sciences, Philadelphia

173: 453-596 (April) 1927

Newer Physiology of Gastro-Intestinal Tract. A. C. Ivy, Chicago.—p. 453.
Gastric Function in Digestive Disorders. C. S. Keefer and A. L. Bloomfield, San Francisco.—p. 460.
*Chronic Ulcer and Carcinoma of Stomach. W. C. MacCarty, Rochester, Minn.—p. 466.
*Infectious Mononucleosis: I. J. E. Cottrell, Philadelphia.—p. 472.
*Id.: II. Histology of Tonsil and Lymph Node. H. Fox, Philadelphia.—p. 486.
Leukopenia in Hodgkin's Disease, Lymphogranuloma. H. R. Miller, New York.—p. 490.
*Hodgkin's Disease of Skin and Mucous Membranes. R. Bine, San Francisco.—p. 503.
*Renal Glycosuria and Pentosuria. H. W. Jones and W. Sussman, Philadelphia.—p. 513.
*Peritoneal Absorption. C. B. Morton, Rochester, Minn.—p. 517.
*Treatment of Resistant Whipworm Infestation. C. W. Lieb, New York.—p. 523.
*Infection of Gallbladder in Relation to Chronic (Pernicious) Anemia. N. W. Jones and T. M. Joyce, Portland, Ore.—p. 526.
*Intradermal Salt Solution Test in Scarlet Fever. B. R. Lovett, Chicago.—p. 539.
*Hemihypertrophy and Twinning. A. Gesell, New Haven, Conn.—p. 542.
*Electrocardiogram in Bronchial Asthma. M. H. Kahn, New York.—p. 555.
Factors of Growth Regulatory Nature in Tissue Cells. A. Fischer, Copenhagen.—p. 562.

Chronic Ulcer and Carcinoma of Stomach.—MacCarty's analysis of chronic ulcer and carcinoma of the stomach is based on 967 cases of ulcer and 1,353 cases of carcinoma.

Infectious Mononucleosis. — Twelve cases of infectious mononucleosis are reported by Cottrell. The clinical and hematologic pictures seem sufficiently distinct and definite to justify the conclusion that the condition constitutes a clinical entity. The salient features are: 1. The usual general symptoms of an acute febrile disease of greater or less severity. 2. An increase in the lymphocytes, amounting to 40 per cent or more of the total leukocytes. 3. Lymphadenopathy. 4. Angina—either hyperemia of the fauces and pharynx, or a severe ulcerative and exudative process involving the tonsils, uvula or pharyngeal wall, or all three. 5. Splenomegaly. 6. The common presence of the organisms of Vincent in the ulcerative and exudative lesions. 7. Increase in the total number of leukocytes. The prognosis is invariably favorable, and complications are almost unknown.

Histology of Infectious Mononucleosis.—The histology of infectious mononucleosis, in Fox's opinion, seems not to be very distinctive, unless it is that there is a marked hyperplasia of all elements, with an attempt to retain the architecture of the lymph nodes.

Hodgkin's Disease of Skin.—Urticaria-like lesions of the skin preceded by many months the other manifestations of Hodgkin's disease in Bine's case. These skin lesions cleared up, but in later stages of the illness, lesions of the mucous membranes appeared, with marked destruction of tissue. At necropsy the appearance of the tissues was so unusual that, until a thorough microscopic study had been completed, the pathologist doubted the correctness of the clinical diagnosis. There was absence of the usual gland enlargements. The suprarenals were fully the size of lemons, and suggested tuberculosis, even though other tuberculous lesions were absent.

Renal Glycosuria and Pentosuria.—Jones and Sussman assert that the differential diagnosis between renal glycosuria and diabetes mellitus is made by the blood sugar estimation; the blood sugar tolerance test, and the estimation of the respiratory quotient after carbohydrate ingestion.

Peritoneal Absorption.—Experiments made by Morton on rabbits and dogs show that phenolsulphonphthalein is absorbed at essentially the same rate from the inflamed and the normal peritoneum, both in mechanical and bacterial peritonitis. An exception noted was that an adhesive type of peritonitis, greatly lessening the peritoneal area, did seem to retard the rate of absorption slightly. It was further concluded that the presence of a hypertonic solution of sugar in the peritoneum did not retard the absorption of the dye.

Treatment of Whipworm Infestation.—Of the eleven cases reported by Lieb, in only one did the patient's symptomatology suggest parasitism. The other ten cases were discovered simply through accidental observations in routine feces examinations of patients suffering from various symptoms. The time honored methods of parasite eradication by means of anthelmintics failed in all but three of the cases. The treatment that was successful in the remaining cases is described as follows: The patient is given 2 ounces (60 cc.) of castor oil and is then placed on a low residue diet. Then, on each of four successive days, he is given a 2 liter enema with 0.5 per cent solution of monohydrated sodium carbonate, to which is added 1 ounce (30 cc.) of colloidal kaolin. Kaolin is also given by mouth, in 1 ounce doses, once daily, on each of these days. The alkali is given for the purpose of dissolving the mucus. The kaolin tends to cut the thicker mucus and mechanically "de-mucuses," so to speak, the wall of the entire colon. After this four day treatment, the kaolin is discontinued, but the alkaline enema is continued for two days or more. After complete expulsion of this enema, 8 ounces (236 cc.) of crude oil is injected into the rectum through a large syringe, and the patient instructed to retain it as long as possible.

Infection of Gallbladder in Pernicious Anemia.—In every case of pernicious anemia with which Jones and Joyce have personally worked, a chronic infection of the gallbladder has been demonstrated. A small group of cases, which resembled mild pernicious anemia, possessed the same type of biliary infection, and on removal of the infection, the patients were restored to fairly normal health.

Intradermal Salt Solution Test in Scarlet Fever.—The time required for disappearance of the wheal made by injecting salt solution intradermally was found by Lovett to be shortened in scarlet fever, with the amount of shortening roughly proportional to the severity of the illness. In the absence of complications the time returned to normal rapidly, usually before the patient was ready to be out of bed. Urticaria was associated with a shortened disappearance time. A disappearance time of less than thirty minutes may be taken as an additional indication, besides the patient's general condition, for giving scarlet fever antitoxin.

Hemihypertrophy and Twinning.—The literature on fifty-three cases of hemihypertrophy is reviewed by Gesell, and two new cases are reported.

Electrocardiogram in Bronchial Asthma.—Of fifty cases of bronchial asthma and emphysema reported on by Kahn, ten showed electrocardiographic evidence of right ventricular preponderance. The remaining cases either did not show preponderance electrocardiographically or showed left ventricular preponderance in about equal number. Among these, a large proportion of cases showed hypertension and aortic atheroma—factors which influenced the hypertrophy of the left ventricle to a degree sufficient to mask the electrocardiographic evidence of right ventricular hypertrophy. Four of the cases showing right ventricular preponderance also showed high P_2 and P_3. Inversion of the T wave in lead III did not show any particular relation to the ventricular predominance.

American J. of Obst. & Gynec., St. Louis

13: 419-550 (April) 1927

Theophilus Parvin. G. C. Mosher, Kansas City, Mo.—p. 419.
*Postpartum Care. J. O. Polak, New York.—p. 432.
*Obstetric Future of Women Delivered by Cervical Cesarean Section. L. E. Phaneuf, Boston.—p. 446.
Lipiodol Injection of Uterus and Oviduct. L. M. Randall, Rochester, Minn.—p. 457.

*Puerperal Infection Due to Anaerobic Streptococci. O. H. Schwarz and W. J. Dieckmann, St. Louis.—p. 467.
*Rectal Ether Analgesia in Labor. J. A. Harrar, New York.—p. 486.
Prenatal Study. T. Welton, New York.—p. 494.
*Conduct of Labor and Management of Obstetric Emergencies: Six Thousand, Five Hundred and Sixty-Two Cases. C. A. Gordon, New York.—p. 501.
Vaginal Hysterectomy. J. W. Kennedy, Philadelphia.—p. 506.
Transverse Excision of Fundus Uteri with Ovarian Conservation. O. Beuttner, Geneva, Switzerland.—p. 512.
Biologic Defense in Puerperal Infection. P. Findley, Omaha.—p. 514.
Physical Therapy of Uterine Affections. J. Riviére, Paris.—p. 518.
Ruptured Uterus. A. B. Davis, New York.—p. 522.
Treatment of Malignancy. G. W. Crile, Cleveland.—p. 529.
Heart Disease Complicating Pregnancy. B. E. Hamilton and F. S. Kellogg, Boston.—p. 535.
*Developmentally Unfit Infant. G. van A. Brown, Detroit.—p. 541.

Postpartum Care.—In Polak's opinion, more than 60 per cent of the lesions which make up the diseases peculiar to women are the direct results of poor midwifery, the incidence of trauma, infection and a lack of appreciation of the physiologic and biochemical processes which take place in involution. He describes the methods that he employs to prevent disastrous results. Speaking of the pessary, he says: "The large majority of acquired retroversions, provided the patient has intact structures, if treated before they become flexions, can be relieved and many times permanently cured with the pessary."

Results of Cervical Cesarean Section.—A series of forty-one repeated cervical cesarean sections has convinced Phaneuf that the operation is sound in principle, easy of performance and remarkably free from untoward after-effects. The convalescence is more nearly that of a pelvic delivery, as the lack of handling of intestines reduces shock and distention to a minimum.

Puerperal Infection Due to Anaerobic Streptococcus.—In many of these cases, Schwarz and Dieckmann isolated *Streptococcus putridus*, but they are convinced that other types of anaerobic streptococci which they have encountered are also able to produce pathogenic lesions, but do not do this to the same degree as the organism which Schottmüller described. They advise that in cases of pelvic thrombophlebitis due to anaerobic organisms, particularly *Streptococcus putridus*, ligation of all pelvic veins should be attempted. If the patient's condition justifies further procedure, the infected uterus with the tubes and ovaries should be removed, both to remove the infection of the uterus and to limit the degree of pelvic edema which results from ligation of this kind. If the best results are to be obtained from such a procedure, it must be done as soon as the organism has been recovered from the blood stream in connection with a chill. It is also important to cleanse the uterus early in all cases in which there is a profuse foul discharge.

Rectal Ether Anesthesia in Labor.—Harrar has used rectal ether anesthesia in 580 cases of labor with very satisfactory results. He has not seen any ill results to the mother, and the usual disadvantages of other methods of easing pain in childbirth—perineal delay and asphyxia of the new-born child—are not in evidence. In comparison with the Freiburg "Dämmerschlaf," the effect produced on the mother's suffering is very similar in typical cases; but there is no inhibition of good bearing down efforts in the second stage, and there are no alarms regarding the respiratory condition of the child at birth. Rectal analgesia especially takes the place of intermittent nitrous oxide gas anesthesia during the last few hours of labor. Since it is simple it can be used in the home without the service of a skilled anesthetist.

Conduct of Obstetrics.—Gordon believes that there is a rapidly widening gap between the specialist, on the one hand, and the average man, who handles the bulk of obstetrics. He says hospitals might well open their doors for the practice of obstetrics to all those near them who will agree to follow the rules for technic, consultations, and operative deliveries, and to report their difficulties and casualties at the staff conference. Not the training of more specialists, but continuous education of the average man is important. That means graduate education, not by providing courses for those who seek them, but by the organization of hospitals everywhere, making available for all the vast amount of clinical material which passes through their wards, and carrying to all clinical opportunities for a review of their own experiences which are now denied them. Hospitals will then arrive at their full measure of usefulness, and physicians will discharge their obligations to the public and to one another.

Developmentally Unfit Infant.—Brown says that the best treatment for the developmentally unfit infant is well illustrated in Maeterlinck's play the "Bluebird," in which we are taken to the "land before birth" where children are waiting to be born, having selected their parents-to-be; or in the advice of Oliver Wendell Holmes to children "to choose good grandparents." When the average man learns that he is spending an enormous portion of his wages to insure his family against disease, when a wise marriage would have given him this insurance free of charge, he is bound to be impressed.

American Journal of Psychiatry, Baltimore

6: 613-773 (April) 1927

*Infantile Convulsions. D. A. Thom, Boston.—p. 613.
Epidemiology of Mental Disease. H. B. Elkind, Boston.—p. 623.
*Care of Tuberculosis Patients in Mental Hospitals. H. I. Klopp, Allentown, Pa.—p. 641.
Relation Between Psychiatry and Social Sciences. H. M. Adler, Chicago.—p. 661.
Constitutional Psychopathic Inferior Menace to Society and Suggestion for Disposition of Such Individuals. R. H. Bryant, Pineville, La.—p. 671.
Mental Deficiency and Psychiatrist. H. W. Potter, Thiells, N. Y.—p. 691.
Review of Industrial Psychiatry. M. Sherman, Chicago.—p. 701.
Neuropsychiatric and Disabled Wards of United States Government. J. J. Kindred, Queensborough, N. Y.—p. 711.
Determination of Intellectual Regression and Progression. G. van N. Dearborn, Kingsbridge, N. Y.—p. 725.

Infantile Convulsions.—The figures given by Thom indicate that infantile convulsions occur sixty-seven times in every thousand cases, or about once in every fourteen cases. In 265 cases, quite unselected, reports of which were gathered from a house to house canvas, 29 per cent of the patients were either mentally retarded or epileptic. There was little or no relation between the exciting factor of the first convulsion, that is, whether it was associated with trauma, gastro-intestinal upset, or an acute infection, and the likelihood of the convulsion's persisting or the child's intellectual equipment being impaired. Of the 265 patients forty-two, or 16 per cent, were mentally deficient, and thirty-five, or 13 per cent, were continuing to have convulsions. The incidence of mental deficiency and epilepsy was almost twice as great in those cases in which there was no apparent exciting cause for the first convulsion. Those cases in which the convulsions occurred without any apparent exciting factor (that is, without trauma, teething or gastro-intestinal upsets) are invariably more significant, and the prognosis should be more guarded than in cases in which the convulsion is associated with some definite cause. In a fairly large group of cases, the convulsion is only a symptom of an unstable nervous system, one that is unable to withstand the ordinary vicissitudes to which the normal child is subjected. There is undoubtedly a fairly large group of convulsive disorders in childhood, in which the convulsions are symptoms of an undiagnosed meningitis or encephalitis, which leaves behind irreparable injury to the nervous system. The convulsion itself, though not associated with any devastating disease, such as meningitis or encephalitis, may produce injury from which the brain never recovers. The convulsions associated with rickets and tetany may leave behind very definite injury to the nervous system. There is reason to believe that if the infantile convulsions associated with rickets, gastro-intestinal upsets and acute infections were looked on more seriously, and a greater effort was made to prevent their occurrence during early life, much epilepsy and mental deficiency might be prevented.

Care of Tuberculosis Patients in Mental Hospitals.—Klopp shows that there has been definite progress in the care, treatment and segregation of tuberculous patients in mental hospitals, but that there is room for further improvement.

American Journal of Public Health, Albany, N. Y.

17: 203-310 (March) 1927

Health Department and Practicing Physician. H. F. Vaughan, Detroit.—p. 203.
Effects of Silica Dust on Lungs: I. R. R. Sayers, Washington, D. C.—p. 208.
Laboratory Aspects of College Courses in Hygiene. H. G. Rowell, New York.—p. 215.
*Treatment of Milk by Electrical Method. S. C. Prescott, Cambridge, Mass.—p. 221.
Classification and Grading of Milk. E. Kelly, Washington, D. C.—p. 224.
Sanitary Engineering in Foreign Countries. V. G. Heiser, New York.—p. 227.
Public Health Engineering in Australia. F. F. Longley, Ampere, N. J.—p. 228.
Need for Improved Vital Statistics. R. M. Woodbury, Washington, D. C.—p. 233.
Nursing in Relation to Three Plans for Municipal Health Departments. S. C. Nelson, Boston.—p. 239.
Enteric Infections Simulating Typhoid in Virginia. A. H. Straus, Richmond, Va.—p. 247.
Ventilation Standards. W. J. McConnell, Philadelphia.—p. 251.

Treatment of Milk by Electricity.—Prescott experimented for one year with the electrical treatment of milk proposed by the Medical Research Committee of Great Britain in 1914. The milk did not at any time give a cooked taste, the cream line was well marked, and the volume of cream appeared as in untreated milk. The keeping quality was excellent. The studies on the reduction of the number of bacteria have shown, in general, a high efficiency. An average count of about 20,000 thermophilic organisms per cubic centimeter was obtained in the raw milk, and about 80 per cent of these were destroyed by treatment. Studies on some of the surviving types of bacteria gave, as common survivors, one strain of chromogenic sarcina, one chromogenic micrococcus, and three spore-forming rod-shaped bacteria, of which two grew readily at from 50 to 55 C. Colon bacilli were not found in the samples of treated milk. Tubercle bacilli do not survive.

American J. Roentgenol. & Rad. Therapy, New York

17: 405-506 (April) 1927

Roentgen-Ray Diagnosis of Colitis. J. L. Kantor, New York.—p. 405.
*Roentgenologic Sign of Mucous Colitis. A. W. Crane, Kalamazoo, Mich.—p. 416.
Roentgen-Ray Diagnosis of Lesions of Upper Urinary Tract Unassociated with Calculus. W. M. Shaw, Jacksonville, Fla.—p. 426.
Obstructive Emphysema: Case. J. A. Wilson, Washington, D. C.—p. 432.
*Roentgenologic Study of Chest in Terminal Stage of Pulmonary Tuberculosis. F. K. Herpel, West Palm Beach, Fla.—p. 436.
Roentgenographic Estimation of Concentration of Tetraiodophenolphthalein in Gallbladder. R. R. Newell, San Francisco.—p. 443.
*Traumatic Pneumoventricle of Cerebrum. S. C. Davidson, Rochester, N. Y.—p. 447.
Chondroma of Vertebrae: Case. R. J. May, Cleveland.—p. 452.
Horseshoe Kidney: Case. R. M. Lecomte, Washington, D. C.—p. 456.
Treatment of Uncontrollable Adolescent Bleeding with Radium. W. Neill, Jr., Baltimore.—p. 461.

Roentgenologic Sign of Mucous Colitis.—The sign, described by Crane as the string sign, depends for its significance on the continuity of this mucoid material within the colon. The string sign may involve any part of the colon, the ascending colon least often, the transverse only at times, most often the descending colon and rarely the sigmoid.

Stereoscopic Roentgenography of Tuberculous Chest.—The bodies of 100 persons, dying in a hospital devoted to the care of the tuberculous, have been examined by Herpel by stereoscopic roentgenograms of the chest. Certain tables have been worked out in the analysis of these roentgenograms, showing the incidence of various types of tuberculosis in these patients, with data concerning the pleural complications, the condition of the heart, cavitation and fibrosis. A high percentage of acute miliary tuberculosis was present in this series of deaths from tuberculosis; 23 per cent of the deaths were due to typical acute miliary tuberculosis. Approximately 25 per cent of the patients in this series presented, both from a roentgenologic and a pathologic standpoint, evidences of a combined tuberculous and syphilitic process.

Traumatic Pneumoventricle of Cerebrum.—Two cases of traumatic pneumoventricle of the cerebrum are reported by Davidson, with a mortality rate of 50 per cent. The condition follows fracture of the skull, when the fracture is in such a location as to permit the entrance of air into the cranial cavity. The most probable route by which air gains entrance into the ventricles of the brain is by means of the subarachnoid space.

American Journal of Surgery, New York

2: 307-414 (April) 1927

*Plantar Fascia in Talipes Cavus. J. T. Rugh, Philadelphia.—p. 307.
Chronic Gallbladder Disease. A. F. R. Andresen, New York.—p. 315.
Internist's Problem in Anesthesia. A. H. Waterman, Chicago.—p. 320.
Diathermy in Urogenital Diseases. R. C. Graves, Boston.—p. 327.
Physical Therapy: Principles. V. C. Pedersen, New York.—p. 334.
Id.: In Medicine and Surgery. N. E. Titus, New York.—p. 341.
Iodine Hyperthyroidism. A. S. Jackson, Madison, Wis.—p. 346.
Complications and Their Prevention in Goiter Surgery. G. S. Fahrni, Winnipeg.—p. 350.
Preoperative Iodine Therapy in Toxic Goiter. A. Graham, Cleveland.—p. 354.
Cardiospasm Complicated by Pulmonary Abscess. P. P. Vinson, Rochester, Minn.—p. 359.
*Abdominal Injury. H. B. Eisberg, New York.—p. 362.

Operation for Talipes Cavus.—The principle of the operation which Rugh first described in 1919 is the removal of the structure that is primarily responsible for the deformity, and that is the cause of the relapse and of the continued progress of the deformity, and its replacement by a fat and fascia flap taken from the patient's leg.

Abdominal Injury.—Eisberg relates the case of a boy who fell on his abdomen while hitching on an automobile. The preoperative diagnosis was (1) rupture of the rectum, with extrusion of the small intestine through the anus, and (2) fractured pelvis. When the abdomen was opened, a loop of ileum 60 cm. long was found torn from its mesentery, which passed through a rent in the mesosigmoid from right to left and downward through a tear in the posterior parietal peritoneum, approximately over the sacro-iliac synchondrosis. Further examination revealed the same loop passing downward behind the rectum, which was stripped from the hollow of the sacrum and had a laceration 5 cm. in length, 2 cm. above the anal margin, through which this same loop passed and finally protruded from the anus. A postmortem roentgen-ray examination showed a fracture through the left acetabulum, and a crushing fracture of the fifth lumbar vertebra. Autopsy verified these observations and disclosed, in addition, a partial dislocation of the sacro-iliac synchondrosis.

American Review of Tuberculosis, Baltimore

15: 399-520 (April) 1927

*Relation of Milk to Tuberculosis. W. H. Park, New York.—p. 399.
Transmission of Tuberculosis Through Domestic Animals. L. Rabinowitsch-Kempner, Berlin.—p. 419.
Studies on Pulmonary Tuberculosis: II. Healthy Adult Chest: I. Roentgen-Ray Findings. H. K. Pancoast, Philadelphia, F. H. Baetjer, Baltimore, and K. Dunham, Cincinnati.—p. 429.
Intrathoracic Annular Shadows. R. S. E. Murray, Johnson City, Tenn.—p. 472.
Artificial Pneumothorax Following Spontaneous Pneumothorax of Contralateral Lung. H. F. Gammons, Alexandria, La.—p. 475.
Motor, Sensory and Trophic Reflexes from Lung. F. M. Pottenger, Los Angeles.—p. 477.
Chemical Analysis of Tubercle Bacillus. T. B. Johnson and R. D. Coghill.—p. 494.
*Vernes Test for Tuberculosis. A. B. Baylis, New York.—p. 500.
Serologic Measure of Tuberculosis. A. Vernes, Paris.—p. 505.
*Refraction and Colloid Lability of Blood Serum in Tuberculosis. J. de Darányi, Budapest.—p. 510.

Relation of Milk to Tuberculosis.—Park discusses the extent of human tuberculosis due to the bovine bacillus, and the practicability of reducing or eliminating it by the destruction of the tubercle bacilli in milk and milk products, or by the elimination of the infection of milk by preventing tuberculosis in cattle. He says that the amount of tuberculosis due to the bovine type has decreased more than that due to the human type in cities where pasteurization is in operation.

Vernes Test for Tuberculosis.—Baylis regards the Vernes test for tuberculosis a distinct contribution to serologic methods in the diagnosis of tuberculosis, and a guide to treatment.

Colloid Lability of Blood Serum in Tuberculosis.—De Darányi avers that the colloid lability reaction indicates the

activity of the tuberculous process. In incipient cases refraction is still normal, and colloid lability in most cases, if not strong, is already positive. In chronic tuberculosis both values are increased. In grave cases, there are low refraction values with very strongly positive colloid lability. In serial examinations, the increase of refraction and colloid lability means a progression of the tuberculosis, and the decrease of both that healing is taking place. An increase of colloid lability to strongly positive reactions, with a diminution of refraction, that is, an inverse progression of both values, indicates a bad prognosis, especially if hyporefraction values are reached.

Boston Medical and Surgical Journal

196: 635-676 (April 21) 1927

Diagnosis of Abdominal Emergencies. J. M. Birnie, Springfield, Mass.—p. 635.
*Primary Carcinoma of Pancreas. B. M. Fried, Boston.—p. 640.
Conservative Treatment of Optic Nerve Disturbances from Focal Infection. L. E. White, Boston.—p. 644.
*Low Protein Diets in Chronic Nephritis with Nitrogen Retention. M. Smith, Boston.—p. 649.
Directory for Wetnurses. F. B. Talbot, Boston.—p. 653.

Primary **Carcinoma of Pancreas.**—In the case reported by Fried there was a history of excruciating epigastric pain of one year's duration in a man, aged 70. At the necropsy, Fried found a primary carcinoma of the tail and the body of the pancreas, with metastases to the lungs and the liver.

Low Protein Diets in Chronic Nephritis.—Smith shows that diets of lower protein content than are commonly used in the dietary treatment of chronic nephritis with nitrogen retention are feasible. The amount of protein allowed in the diet should be based on the amount of nonprotein nitrogen which the patient is able to excrete during twenty-four hours. If the nitrogen retention is to be relieved, the protein nitrogen in the diet should be less than the total twenty-four hour content of nonprotein nitrogen in the urine. When the twenty-four hour nitrogen excretory capacity of the kidneys equals the amount of endogenous nitrogen catabolism, it will be impossible to relieve nitrogen retention by dietary measures. With properly constructed diets, it is approximately accurate to calculate the endogenous nitrogen catabolism at from 0.02 to 0.03 Gm. per kilogram of body weight in twenty-four hours. When any subject partakes of a diet which satisfies the energy requirements in full, but with a protein nitrogen content of less than 1 Gm., there is, at first, a strong negative nitrogen balance, and then this gradually diminishes until it approaches a minimum. If such a diet is indefinitely prolonged, it might be possible to deplete the body protein to a dangerous extent. However, there is sufficient evidence to show that such a point would not be reached for many months. This fact makes it practical to administer diets of very low protein content to patients with chronic nephritis and nitrogen retention, for when chronic nephritis has progressed to such an extent as to make necessary diets practically free from protein, other complications of the disease will be more apt to prove fatal sooner than the effects of protein starvation can become apparent. These measures are highly practical in rapidly relieving nitrogen retention, which is the result of excessive protein intake in the presence of a moderate degree of renal insufficiency. After relief of retention, a protein intake could be given which would ensure nitrogen balance.

Canadian Medical Association Journal, Montreal

17: 389-500 (April) 1927

Varieties of Headache. Dawson, London.—p. 389.
Anemia. D. Graham, Toronto.—p. 393.
Treatment of Pernicious Anemia. H. C. Wales, Toronto.—p. 397.
Surgery of Peptic Ulcer. C. K. P. Henry, Montreal.—p. 400.
Pain in Lower Abdomen. G. E. Wilson, Toronto.—p. 405.
*Effect of Injection of Lipiodol and Rate of Its Disappearance in Normal and Diseased Lungs. D. H. Ballon and H. C. Ballon, Montreal.—p. 410.
*Diverticula of Appendix. W. H. Chase, Montreal.—p. 416.
Hereditary Abnormalities of Eye: III. M. T. Macklin, London, Ont.—p. 421.
*Urine in Diabetes Insipidus. A. B. Illievitz, Montreal.—p. 424.
*Blood Transfusion in Bronchial Asthma. W. T. McBroom, Toronto.—p. 426.
Exophthalmic Goiter. W. Magner, Toronto.—p. 428.
*Postoperative Vomiting Treated by Glucose and Insulin. H. S. Dolan, Montreal.—p. 431.
Wound Infection in Appendicitis. L. H. McKim, Montreal.—p. 434.
*Influenza Encephalitis. W. D. Patton, Vancouver, B. C.—p. 436.
Problems of Childhood. W. M. Musgrove, Winnipeg.—p. 438.
Nutrition and So-Called Indigestion. J. A. MacGregor, London, Ont.—p. 442.
*Agranulocytic Angina. D. Prendergast, Toronto.—p. 446.
Spontaneous Rupture of Diaphragm. B. R. Mooney, Edmonton, Alta.—p. 447.
Hernia in Peritoneal Fossae: Two Cases. R. B. Malcolm, Montreal.—p. 449.
Blood Transfusion Therapy. C. K. P. Henry, Montreal.—p. 450.

Effect of Injection of Iodized Oil.—Although iodized oil can be given with impunity in most cases, the Ballons say that it should not be injected in cases of pulmonary tuberculosis of the exudative type nor in tuberculous pneumonias, as immediate reactions are produced and its persistence produces ill effects. Selected cases of the surgical type of pulmonary tuberculosis are usually suitable cases for injection, and do not produce any reactions. The persistence of iodized oil in a tuberculous lung free from abscess or bronchiectasis is about the same as in the normal lung.

Diverticula of Appendix.—Chase is of the opinion that this condition is more common than is generally realized. It offers one explanation of the recurring, so-called subacute appendicitis extending over months or years, and terminating quite unexpectedly and rapidly by perforation which is otherwise unexplainable. Three cases are reported.

Urine in Diabetes Insipidus.—In a case of diabetes insipidus, Illievitz failed to find either inosite or creatinine in the urine. The urine of diabetes insipidus apparently does not contain any substance which itself may be the causative factor of the polyuria. A substance of unknown chemical composition was isolated from the urine. This was not found in the urine when polyuria was experimentally induced. The substance was isolated and found to be viscid, insoluble in water, but soluble in ether and chloroform; it was partly soluble in 75 per cent alcohol, but could be precipitated with absolute alcohol, forming a fine, amorphous, purplish sediment. Strong and weak acids do not affect it, but it is slowly and totally soluble in strong alkalis, forming a colorless solution, and can be reprecipitated by means of strong acids. An attempt to establish its relationship to indican or tryptophan failed. The urine from which the unknown substance was extracted did not contain either indican or tryptophan.

Blood Transfusion in Bronchial Asthma.—Blood transfusion was done by McBroom in five cases of bronchial asthma. A child and two young men are well today, and have not had recurrences. Two older persons are improved but not altogether free of their trouble.

Treatment of Postoperative Vomiting.—To prevent postoperative vomiting, Dolan gives 100 cc. of orange juice by mouth, with 5 units of insulin hypodermically, one-half hour before anesthesia. Three hours after operation, 100 cc. of 20 per cent dextrose solution is given hypodermically or intravenously.

Influenza Encephalitis.—Since other types of encephalitis than the lethargic are common, the term "influenza encephalitis" is suggested by Patton, restricting the use of the word "lethargic" to the first type, and giving the name "myoclonic" to the second and "maniacal" to the third type. He also asks, Can it be that the disease is a septicemia or bacteremia due to the influenza organism? Believing the disease to be a septicemia, he gives intravenous injections, daily, of from 10 to 15 cc. of a 0.5 per cent solution of neutral acriflavine in physiologic sodium chloride solution. He reports good results.

Agranulocytic Angina.—In the case reported by Prendergast, the hemoglobin was 25 per cent, and the leukocytes, 10,000 per cubic millimeter. The blood smear showed pale red cells, and the platelets and leukocytes appeared decreased in number. There were 90 per cent apparently normal small lymphocytes, and 10 per cent large lymphocytes. No polymorphonuclear or granular cells of any sort were seen.

Journal of Clinical Investigation, Baltimore

4: 1-148 (April 20) 1927

*Velocity of Blood Flow: I. H. L. Blumgart and O. C. Yens, Boston.—p. 1.
*Id.: II. H. L. Blumgart and S. Weiss, Boston.—p. 15.
*Inorganic Sulphates in Human Blood. R. F. Loeb and E. M. Benedict, New York.—p. 33.
*Preferential Utilization of Carbohydrate in Diabetes. W. R. Campbell and J. Markowitz, Toronto.—p. 37.
Pulmonary Gas Diffusion in Polycythemia Vera. G. A. Harrop, Jr., and E. H. Heath, Baltimore.—p. 53.
*Welch Bacillus Infection of Intestinal Tract Etiologic Factor in Pernicious Anemia. R. N. Nye, Boston.—p. 71.
*Obesity: Source of Heat During Periods of Reduction. E. H. Mason, Montreal.—p. 93.
*Oxyhemoglobin Dissociation Curves of Whole Blood in Anemia. D. W. Richards, Jr., and M. L. Strauss, New York.—p. 105.
*Relation Between Blood Urea Concentration and Amount of Functioning Renal Tissue. E. M. MacKay and L. L. MacKay, San Francisco.—p. 127.
*Distribution of Jaundice in Circulatory Failure. J. Meakins, Montreal.—p. 135.

Estimating Velocity of Blood Flow.—A new method is presented by Blumgart and Yens for the measurement of the velocity of blood flow in man. The active deposit of radium is injected into the antecubital vein of one arm, and its time of arrival in the other arm is detected by means of a modified C. T. R. Wilson cloud chamber device.

Normal Velocity of Blood Flow.—The circulation times of fifty-three normal resting male individuals are presented by Blumgart and Weiss. The average arm to arm circulation time was eighteen seconds. The average arm to arm circulation time when reduced to square meter of body surface was ten seconds in individuals between the ages of 15 and 29, and eleven seconds between the ages of 30 and 75. With a conspicuous increase in the pulse rate there is a slight but definite tendency toward an increased velocity of blood flow. A relatively low ventricular rate does not seem to lower the velocity of blood flow below that exhibited by individuals with higher ventricular rates. Normal variations in the blood pressure bear no relation to the normal variations in the velocity of blood flow.

Estimating Inorganic Sulphates in Blood.—Loeb and Benedict used the gravimetric method in their work. They found that the concentration of sulphate ion in the blood of patients suffering from cardiac and renal disorders is at times markedly increased, and that it nearly parallels the retention of nitrogen. There is little deviation from the normal sulphate ion values in certain other pathologic conditions. The normal sulphate ion content of serum varies between 0.40 and 1.00 milli-equivalent per liter. In nephritis with nitrogen retention, the sulphate ion is retained in the blood and roughly parallels the nonprotein nitrogen. Inorganic sulphate ion plays a relatively important rôle in the partition of the acid radicals in the blood in nitrogen retention nephritis.

Preferential Utilization of Carbohydrates in Diabetes.—A new method of studying the question of preferential metabolism of certain carbohydrates or related substances is presented by Campbell and Markowitz. This consists in feeding to depancreatized animals receiving insulin known quantities of the test substance in substitution for equal amounts of glucose. The results obtained by this method on levulose, inulin, dihydroxyacetone and glycerin do not afford evidence that greater quantities can be utilized by the diabetic organism than of glucose itself. This suggests that these substances must pass through a glucose phase in their metabolism and therefore do not undergo any preferential utilization as compared with other carbohydrates. The application of these results to the treatment of human diabetes mellitus is indicated.

Welch Bacillus in Stool in Pernicious Anemia.—Nye asserts that in stools from cases of pernicious anemia there is a great increase in the number of *Bacillus welchii* spores, as compared with normal stools and the stools from the majority of cases of miscellaneous disease. This same increase in *B. welchii* spores is also present in stools from cases of gastric achylia without pernicious anemia. Counts of vegetative forms would seem to indicate that in any of the foregoing conditions the number of active or vegetative forms of *B. welchii* present in the stools is practically the same. On the basis of these observations and the tendency of *B. welchii* to form spores in alkaline mediums, Nye says that it seems logical to assume that the spore increase in pernicious anemia is secondary to the gastric achylia rather than indicative that pernicious anemia is caused by chronic intestinal infecton with *B. welchii*.

Studies on Obesity.—Studies on five cases of obesity in which the patients were maintained on subcaloric diets for prolonged periods of time are reported by Mason. In all cases the ketogenic-antiketogenic molecular ratio exceeded 1:1. In one case, the same ratio exceeded 1:2 throughout an experimental period of seventy consecutive days. In no case, during the experimental periods, was there any evidence of ketosis.

Oxyhemoglobin Dissociation Curves in Anemia.—The oxyhemoglobin dissociation curves of the whole blood of several subjects with anemia, primary and secondary, were investigated by Richards and Strauss at serum p_H of 7.24, 7.44 and 7.64. At the lower p_H values, all curves studied were close to the curves of normal blood. At serum p_H 7.64, the anemia curves were definitely lower than the normal. Points on the curve of a patient with polycythemia vera did not show evidence of abnormality.

Blood Urea Concentration.—Data are presented by the MacKays that show that the blood urea concentration increases slightly with any reduction from the normal amount of functioning renal tissue, but does not begin to rise markedly until the kidneys are reduced to less than half their original size. Beyond this point the blood urea concentration rises with increasing rapidity to higher and higher levels as the amount of renal tissue is still further decreased. The interesting fact is brought out that a patient with chronic interstitial nephritis may have a blood urea concentration which is within the limits of normal, even though only 50 per cent of the normal amount of functioning renal tissue remains.

Jaundice in Circulatory Failure.—Meakins reports six cases. The pigmentation of the skin in jaundice would appear to be due to the disposition of bile pigments in the cellular elements rather than to a diffusion of the pigments into the intercellular spaces. Microscopic examination of the skin and other tissues shows the cells themselves to contain deposited bile pigments. If the bile pigments were not in solution in the intercellular spaces, it would explain the isolated observation that jaundice of the skin may occur in edematous areas, provided the jaundice antedates the occurrence of the edema. In this one instance the skin was pigmented, while the edema fluid was free of bile pigments. It would appear that an adequate explanation of the absence of bile pigments in edema and serous fluids is not yet possible.

Journal of Laboratory & Clin. Med., St. Louis

12: 629-734 (April) 1927

*Nephelometry. H. Kleinmann, Berlin.—p. 629.
*Diffuse Cortical Sclerosis. G. Y. Rusk and C. E. Nixon, San Francisco.—p. 644.
Integration of Hospital Laboratory Work. P. Hillkowitz, Denver.—p. 666.
Treponematosis in Rural Population of Haiti. C. S. Butler and E. Peterson, Haiti.—p. 670.
*Hemoglobin and Erythrocytes in South. L. S. Lippincott, Vicksburg, Miss.—p. 679.
Drop Recorders. O. S. Gibbs, Halifax, N. S.—p. 686.
New Hydrogen Ion Colorimeter. R. B. H. Gradwohl, St. Louis.—p. 694.
Rapid Method for Determination of Chlorides in Blood or Urine. S. L. Leiboff, New York.—p. 702.
Estimating Blood Pressure in Rabbits. E. M. Watson, London, Can.—p. 706.

Nephelometry.—Kleinmann describes a new nephelometer designed by him and gives a new standard of turbidity. He stresses the fact that nephelometry has proved eminently useful in microchemical and biologic research.

Diffuse Cortical Sclerosis.—Two cases of diffuse cerebral sclerosis are reported by Rusk and Nixon, the ages of the patients being 1 year and 5 months, and 2 years and 10 months, respectively. In both cases the family history was negative, and there was nothing significant in the past

history. Vision was involved in both children, and hearing in the second and probably also in the first. The first child was definitely rigid when first seen, and the deep reflexes were hyperactive at that time; later, there was little rigidity and the knee jerks could not be obtained. The second child was spastic and had exaggerated deep reflexes, except in the right leg where a flaccid paralysis developed while the child was in the hospital. In neither case were there pathologic reflexes. Both cases present in a general way a similar pathologic picture. Grossly, there was a striking diffuse, symmetrical atrophy of the cerebral convolutions, with wide but rather shallow sulci in brains which presented normally disposed fissuration. The fresh brains had an elastic firmness to the touch. The microscopic picture consisted of an enormous overgrowth of the glia tissue in the cortex and, to a much less extent, in the white matter of the brain, basal ganglions, brain stem and cord, with marked involvement of the cortical nerve cells and, to a less degree, of the nerve cells of the basal ganglions, brain stem and spinal cord.

Hemoglobin and Erythrocytes in South.—Lippincott asserts that the normal average hemoglobin percentage and erythrocyte counts are lower in Mississippi than the usually accepted normal standards. Color indexes average slightly below 1. While erythrocyte counts do not change with the seasons as does the hemoglobin, most of the higher counts occur in the colder months.

Journal of Nervous & Mental Dis., New York

65: 345-456 (April) 1927

Syndrome of Mental Automatism: Rôle in Formation of Chronic Systematized Psychoses. P. Bailey, Boston.—p. 345.
*Intraventricular Hemorrhage. I. J. Sands and M. Lederer, New York.—p. 360.
*Treatment of Some Epileptics with Calcium Chloride and Glucocalcium. E. Klein and E. Forcione, Washington, D. C.—p. 372.
Columnar Arrangement of Primary Afferent Centers in Brain Stem of Man. W. Freeman, Washington, D. C.—p. 378.

Intraventricular Hemorrhage.—Sands and Lederer report three cases. Premonitary symptoms of intraventricular hemorrhage are absent. The headache, dizziness and fainting spells which were present in two of these cases pointed to the concomitant cerebral arteriosclerosis. The last case, in which aneurysms were found, presented a chain of symptoms frequently seen in cases of ruptured intracranial aneurysms.

Treatment of Epilepsy.—Klein and Forcione did not derive benefit from the use of calcium over four and five month periods in various types of epilepsy. Not only was there no diminution in the number of seizures, but there was a tendency toward an increase. No advantage was seen in the use of glucocalcium over calcium chloride. There was not a sustained increase in the calcium concentration of the blood serum after the injection of from 0.5 to 2 Gm. of calcium salts.

Jour. Pharmacol. & Exper. Therap., Baltimore

30: 429-505 (April) 1927

Toxic Action of Acetaldehyde on Organs of Vertebrates. J. V. Supniewski, Baltimore.—p. 429.
Pharmacologic Properties of Di-Meta-Amino-Benzoyl Rivanol. J. V. Supniewski, Baltimore.—p. 439.
*Achlorhydria: Treatment with Hydrochloric Acid and Pepsin. H. V. Dobson, Rochester, Minn.—p. 447.
*Quantitative Comparison and Toxicologic Study of Ephedrine and Epinephrine. J. E. Nadler, Woods Hole, Mass.—p. 489.

Treatment of Achlorhydria.—A patient with achlorhydria has been studied by Dobson by fractional meal tests to determine the effect of giving acid and pepsin. These substances have been administered, combined and separately, in varied dosage, single or fractional, and at different times in relation to meals. A few days after the administration had been begun there were evidences that secretion had increased, and after thirteen days free hydrochloric acid and pepsin in fair concentration were found in the stomach spontaneously after a test meal. The dosage necessary to maintain free acid in normal concentration in the stomach throughout digestion was dependent on the composition of the meal, especially from the standpoint of protein. For a simple carbohydrate test meal, free acidity could be maintained in normal concentration with adequate dosage at sufficiently frequent intervals during digestion. There was evidence suggesting that free hydrochloric acid not only regulated the activity of pepsin but also influenced its secretion.

Comparative Study of Ephedrine and Epinephrine.—Nadler found that epinephrine is about twenty times as effective as ephedrine in antagonizing the action of the extracts of the parathyroid and the anterior pituitary gland, and twice as effective in antagonizing the action of the extract of posterior lobe of the pituitary gland. Ephedrine is almost ten times more effective than epinephrine in antagonizing barium chloride. On the basis of the minimum effective dose, epinephrine is two and one-half times as efficient as ephedrine.

Medical Journal and Record, New York

125: 437-512 (April 6) 1927

Metabolism in Rheumatism. H. A. Ellis, London.—p. 437.
*Relationship of Diseased Tonsils to Goiter: Nine Thousand Eight Hundred and Sixty-Four Cases. I. Bram, Philadelphia.—p. 442.
Why Periodical Eye Examinations? W. H. Lowell, Boston.—p. 445.
Headache. J. W. Shuman, Los Angeles.—p. 447.
Status of Radiation Therapy. F. T. Woodbury, New York.—p. 448.
Cancer: XIII. Dead Cell. W. Meyer, New York.—p. 452. C'td.
Biloptin (Diiodoatophan): Cholescystography. M. Einhorn, W. H. Stewart and E. J. Ryan, New York.—p. 457.
Injurious Results Following Tonsillectomy. C. C. Rice, New York.—p. 458.
Painful Feet: Neurologic Viewpoint. C. Rosenheck, New York.—p. 461.
Ether Anesthesia and Tuberculosis. N. Blumberg, Philadelphia.—p. 462.
New Duodenal Tube for Treatment of Peptic Ulcer. M. B. Kunstler, New York.—p. 466.
Relation of Focal Infection to Abortion. A. C. Nickel and R. D. Mussey, Rochester, Minn.—p. 467.
Torsion of Fallopian Tube in Virgin. M. Thorek, Chicago.—p. 470.
Analgesia in Obstetrics. J. Walker, Philadelphia.—p. 474.
Persistent Regular Menstruation Throughout Entire Periods of Successive Pregnancies. D. Deutschmann, New York.—p. 478.
Treatment of Uterine Fibroids. B. Mann, Philadelphia.—p. 480.
Total Radium Rays in Small Doses in Chronic Metritis. G. Lacapère, Paris.—p. 482.
Doctor and Patient in Addison's Journals. L. J. Bragman, Syracuse, N. Y.—p. 483.

Diseased Tonsils and Goiter.—Bram favors the removal of diseased tonsils in all goiter patients, not necessarily on the score of direct causal relationship, but because such tonsils are a menace to health. In exophthalmic goiter, diseased tonsils often play a contributory etiologic rôle.

Public Health Reports, Washington, D. C.

42: 1031-1096 (April 15) 1927

*Intradermal Smallpox Vaccination. J. N. Force, Berkeley, Calif.—p. 1031.
*Arsphenamine-Sodium Thiosulphate Treatment of Experimental Syphilis. C. Voegtlin and H. A. Dyer, Washington, D. C.—p. 1045.

Intradermal Smallpox Vaccination.—The literature on the administrative use of the immediate reaction of immunity following smallpox vaccination is reviewed by Force; the causes of failure to obtain this reaction are discussed, and the immediate reaction of immunity following intradermal smallpox vaccination, and the technic of this vaccination, are described. It is stated that in order for the vaccine to reproduce it must come in contact with the derma, and a satisfactory scarification should completely remove the epidermis but should not draw blood. If the epidermis is completely removed there will be a small, brown, circular scab on the sacrified spot twenty-four hours later. If the scarification site presents a pinkish or rose colored spot at this time, the epidermis has not been punctured. The vaccine should be rubbed on the exposed derma, not simply dropped on it.

Treatment of Experimental Syphilis.—In view of the well established therapeutic action of thiosulphate in arsphenamine intoxication, Voegtlin and Dyer experimented to determine whether this drug might not be of value in preventing those toxic manifestations which would otherwise occur as a result of more intensive treatment with the arsphenamines. Large doses of sodium thiosulphate did not decrease the trypanocidal efficiency of arsphenamine, neoarsphenamine or sulpharsphenamine, nor did they exert a deleterious effect on the spirocheticidal action of sulpharsphenamine. Sodium thiosulphate injected intravenously into rats and rabbits was found to have a very low toxicity.

Surgery, Gynecology and Obstetrics, Chicago

44: 433-576 (April) 1927. Part I

Ureteropyelography. W. F. Braasch and B. H. Hager, Rochester, Minn. —p. 433.
*Tendon Transplantation. F. Lange, Munich.—p. 455.
*Results of Cholecystostomy. R. G. Spurling, Louisville, Ky., and L. R. Whitaker, Boston.—p. 463.
*Recurrent Anterior Dislocation at Shoulder. K. Speed, Chicago.—p. 468.
Sarcoma of Rectum. J. H. Weeks, Philadelphia.—p. 478.
Reduction of Vital Capacity Following Operation. E. D. Churchill and D. McNeil, Boston.—p. 483.
Pathogenesis of Jaundice. C. G. Heyd, J. A. Killian and P. Klemperer, New York.—p. 489.
*Splanchnic Anesthesia. G. de Takats, Chicago.—p. 501.
Sterility in Women. J. O. Polak, New York.—p. 520.
*Treatment of Fracture of Neck of Femur. D. P. D. Wilkie, Edinburgh. —p. 529.
*Baldwin Operation for Formation of Artificial Vagina. S. Judin, Serpouhoff, Russia.—p. 530.
*Technic of Open Reduction of Fractures. M. Kirschner, Koenigsberg, Germany.—p. 541.
Obstetric Paralysis. J. W. Sever, Boston.—p. 547.
*Correcting Complete Inversion of Vagina With or Without Prolapse. N. F. Miller, Ann Arbor, Mich.—p. 550.
*Carcinoma of Rectum and Rectosigmoid: Choice of Operation. L. P. Bell, Woodland, Calif.—p. 556.
Recto-Abdominal Maneuver for Determining Engagability of Fetal Head. E. D. Resnik, New York.—p. 563.

Tendon Transplantation.—In all tendon transplantations, Lange uses a silk sinew made out of four or eight threads of Turner silk, number 6 or number 12. The silk is sterilized for fifteen minutes immediately before the operation in a solution of mercuric oxycyanide. In only 3 per cent of the first 850 operations was a failure recorded. In cases of gluteal muscle and the latissimus dorsi, Lange makes use of the erector spinae as a substitute for the gluteal muscles.

Results of Cholecystostomy.—Spurling and Whitaker conclude that the drainage of a diseased gallbladder, with the expectation that it will regain its normal function, is not only a futile procedure but one that endangers the future health of the patient.

Operation to Prevent Recurrent Shoulder Dislocation.—To prevent slipping forward of the humerus, Speed drills a hole about 1 inch deep diagonally into the neck of the scapula. Into this is inserted a bone transplant removed from the anterior surface of the tibia. The transplant is driven home, and about three-fourths inch is left projecting anteriorly and obliquely across the lower anterior margin of the shoulder joint. This does not in any way interfere with normal range of shoulder joint motion, but it does prevent the head of the humerus from slipping out forward into anterior and habitual dislocation.

Splanchnic Anesthesia.—The advantages of splanchnic anesthesia over general anesthesia and paravertebral block in well selected cases are stressed by de Takats. The terms posterior and anterior splanchnic anesthesia are recommended to take the place of the terms used by various authors. Block of the splanchnic nerves on both sides results in an anesthesia of the upper abdominal organs. The lower abdomen can be anesthetized by adding to the splanchnic block the anesthesia of the lumbar rami communicantes.

Treatment of Fracture of Femoral Neck.—Instead of encasing the pelvis and lower extremities in a plaster of paris cast, Wilkie effects abduction by means of an apparatus applied to the lower legs with intervening rods.

Formation of Artificial Vagina.—Judin reports six cases in which the Baldwin operation yielded excellent results. All the operations were done under spinal anesthesia.

Open Reduction of Fracture.—Kirschner describes his method of operating in detail. He disinfects the skin with tincture of tannin (acidi tannici, 7.5 Gm.; spiritus vini, 100 cc., and a few grains of fuchsin). Perfect asepsis and complete immobilization of fragments are the results stressed.

Correcting Complete Inversion of Vagina.—A functional vagina with normal length and direction is produced by Miller by means of two "lifting" sutures attached to the sacro-uterine ligaments. It offers a method of supporting the vaginal apex following vaginal panhysterectomy for complete prolapse.

Operation for Carcinoma of Rectum.—In Bell's opinion, the two-stage abdominoperineal operation is the method of choice when the grade of malignancy is high, or when the physical condition of the patient is such that there is no appreciable operative risk.

44: 1-214 (April) 1927. Part II

*Bone Sarcoma. A. Kolodny, Iowa City.—p. 1.

Bone Sarcoma.—Kolodny presents the results of his study of the bone sarcoma material from the Registry of Bone Sarcoma. This is virtually a monograph on the subject, covering 214 pages, with 104 beautiful illustrations and forty-one plates.

FOREIGN

An asterisk (*) before a title indicates that the article is abstracted below. Single case reports and trials of new drugs are usually omitted

British Journal of Ophthalmology, London

11: 145-208 (April) 1927

Locke's Solution and Cornea. E. N. Hughes.—p. 145.
Retrobulbar Neuritis Associated with Sinusitis. W. S. Thacker-Neville. —p. 147.
Krukenberg's Spindle in Cataract Case. R. R. James.—p. 148.
Treatment of Trachoma by Acetic Acid. J. A. Lea.—p. 150.
Barraquer's Operation for Lens Extraction. J. R. Smith.—p. 152.

British Journal of Radiology, London

32: 81-118 (March) 1927

Roentgen-Ray Diagnosis of Pathologic Conditions of Gallbladder. J. F. Brailsford.—p. 81.
Radiologic Diagnosis of Early Pulmonary Tuberculosis. A. T. H. Nisbet. —p. 101.

British Medical Journal, London

1: 607-652 (April 2) 1927

Varieties of Headache. Dawson.—p. 607.
Surgical Treatment of Paralysis of Vocal Cords and Paralysis of Diaphragm. L. Colledge and C. Ballance.—p. 609.
Cholecystography. D. P. D. Wilkie and C. F. W. Illingworth.—p. 613.
*Id. J. H. Mather and W. R. Williams.—p. 614.
*Epidemic Encephalitis: Permanent Recoveries. A. G. Robb.—p. 615.
Purulent Perichondritis of Larynx. J. A. Gibb.—p. 616.
Transposition of Viscera. A. Cruickshank.—p. 616.
Labor Retarded by Hydrocephalus Terminated by Draining Spina Bifida. R. G. Bingham.—p. 616.

Cholecystography.—Experience with 125 cases has convinced Mather and Williams that cholecystography by the oral method is easier than the intravenous so far as the preliminaries are concerned, and yields equally satisfactory results from a radiographic point of view. The proceeding is devoid of risk, and the toxic effects are practically negligible. The surgical observations confirmed the roentgen-ray diagnosis in 94.3 per cent of the cases.

Recovery from Epidemic Encephalitis.—In 173 cases reviewed by Robb, twenty-one patients died in the acute stage; 152 recovered from the acute attack. Of 141 patients examined, two and one-half years later, only thirteen were apparently well. All the rest showed some evidence of disease. Eighty-three patients showed parkinsonism; eighty-four were totally incapacitated, and twenty-nine were partially incapacitated.

Indian Medical Research Memoirs, Calcutta

No. 5: 1-85 (Feb.) 1927

Distribution of Anopheline Mosquitoes in India and Ceylon. G. Covell. —p. 1.

Journal of Hygiene, London

26: 1-109 (March) 1927

Geographic Distribution of Goiter in School Children in England and Wales. J. M. H. Campbell.—p. 1.
*Melioidosis in Cochin China. R. Pons and M. Advier.—p. 28.
*Id.: Culture of B. Whitmori from Saigon. A. T. Stanton and W. Fletcher.—p. 31.
Melioidosis in Horse. A. T. Stanton, W. Fletcher and S. L. Symonds. —p. 33.
*Influence of External Factors on Mortality from Pneumonia in Childhood and Later Adult Life. H. M. Woods.—p. 36.
Method of Division of Rough and Smooth Type of Colonies Among Bacilli of Salmonella Group. M. M. Nutt.—p. 44.

*Iodine Content of Foods, Manures and Animal Products in Relation to Prophylaxis of Endemic Goiter in New Zealand. C. E. Hercus and K. C. Roberts.—p. 49.
*Specific Toxigenic Properties of Hemolytic Streptococci from Scarlatina and Other Sources. D. G. S. McLachlan.—p. 84.
*Value of Mixed Vaccines in Prevention of Common Cold. F. R. Ferguson, A. F. C. Davey and W. W. C. Topley.—p. 98.

Melioidosis in China.—A case of the septicemic form of melioidosis is recorded by Pons and Advier from Cochin, China, and certain new biologic characters of the causative agent, *B. whitmori,* are described. An animal origin of the infection in this case is considered probable.

Melioidosis: Bacillus of Whitmore.—The biologic characters, and pathologic effects in animal inoculation, of a strain of *B. whitmori* from Saigon are described by Stanton and Fletcher. It is the most virulent strain of the organism from a human source that has so far been encountered. The case from which the organism was recovered was an example of the septicemic form of melioidosis.

Prevention of Pneumonia Mortality in Children.—Woods concludes that the pneumonia mortality of young childhood is largely preventable, and that there is some, perhaps a large element, of preventability in the mortality from pneumonia of adults between 45 and 64, a time of life when, as is well known, there are gross differences between the rates of mortality in different parts of the country.

Iodine Content of Foods.—A comparative study made by Hercus and Roberts of the iodine content of foodstuffs from goitrous and nongoitrous districts established the fact that the soil iodine is accurately reflected in the food iodine. The iodine content of certain vegetables and animal foods is shown to present a well marked seasonal variation. The maximum iodine content of vegetable matter is reached in the late autumn and winter when growth is at a minimum. In the case of eggs the maximum is reached in the summer, in milk, in the spring. Cooking is shown to have little effect on the reduction of the iodine content of root vegetables, seaweed, fish and bread, but to reduce the content of green vegetables by about two thirds. Commercial salt is shown to be an unreliable source of iodine supply, the majority being practically iodine free. Tobacco smoke is a negligible source of iodine supply. A well defined relationship is shown to exist between goiter incidence and iodine excretion in the urine. The iodine content of human milk in the goitrous woman is shown to be lower than in the nongoitrous, and a relationship is shown to exist between the amount of iodine excreted in the urine and milk during lactation. The flesh of fish is shown to vary in iodine content according to its "iodine environment." The addition of small amounts of potassium iodide to the diet of various animals is shown to increase the iodine content of the thyroid glands and of the food products.

Toxin of Scarlet Fever Streptococcus.—Ninety-eight strains of hemolytic streptococci isolated by McLachlan from scarlet fever cases have been found to produce a toxic principle which in high dilutions is capable of evoking a cutaneous reaction in susceptible persons.

Prevention of Colds by Vaccines.—Ferguson et al. are of the opinion that the available evidence suggests very strongly that it is futile to hope for a reduction in the incidence of common colds among the population at large as the result of the prophylactic inoculation of any of the stock vaccines now available.

Jour. Obstet. & Gynaec. British Empire, Manchester

34: 1-184 (Spring) 1927

*Involution of Uterus Postpartum. J. H. Teacher.—p. 1.
Distribution and Significance of Ectopic Decidual Cells. W. Shaw.—p. 28.
*Pathology of Fetal Maceration. C. J. Thomson.—p. 40.
Acute Postpartum Edema of Cervix Uteri. J. W. A. Hunter.—p. 72.
*Indications for Induction of Labor. P. Connan and R. Owen-Jones.—p. 83.
Melanotic Sarcoma of Clitoris. F. Ivens.—p. 91.
*Case of Superfetation. J. Riddel.—p. 93.
Combined Scissors and Needle Holder for Operation of Colpoperineorrhaphy. M. McCullagh.—p. 101.

Involution of Uterus Postpartum.—Teacher says that the fourteenth day is roughly the turning point at which building up definitely exceeds retrogression. At from five to six weeks restoration should be fairly complete, but evidence of recent pregnancy may be recognizable for a considerably longer period, even in circumstances most favorable to involution. Such evidence is found in the presence of pigmented phagocytes, and in the remains of the uteroplacental vessels.

Pathology of Fetal Maceration.—Thomson has examined the tissues of twenty-seven macerated fetuses of viable age. She summarizes briefly the work already done in this field; gives a description of the naked eye and microscopic changes occurring in maceration, and discusses the nature of this process.

Indications for Induction of Labor.—The 123 cases of contracted pelvis and the eighty-two cases of postmaturity discussed by Connan and Owen-Jones, in which labor was induced, occurred in more than 8,000 labors. In 63 per cent of the contracted pelvis cases the operation was performed either too early or need not have been performed at all, and in 61 per cent of the postmaturity cases the operation was performed too early. The only indication recognized by them for induction of labor in a case of so-called postmaturity is disproportion between the head of the child and the pelvis of the mother. The children of women whose labor is induced with castor oil, quinine and pituitary extract do not progress as satisfactorily as those in which labor has not been so induced. Induction of labor for postmaturity and for contracted pelvis with quinine was successful only in 66 per cent and 46 per cent, respectively.

Superfetation.—Riddel reports a case in which a diagnosis of missed abortion was made in the fourth month of pregnancy. At the operation, two fetuses were removed from the uterus. The gestation sacs were separate. The first fetus was of the age of 3½ months, complete with placenta, and was macerated. The second was a fetus of the age of 7 weeks, to all appearances healthy and growing. The uterus was not septate, nor was this a twin pregnancy. The larger fetus had been dead for a considerable time, and the smaller was healthy and growing.

Journal of Physiology, London

62: 315-416 (March 15) 1927

*Osmotic Pressure of Aqueous Humor. W. S. Duke-Elder.—p. 315.
Localization of Receptors Involved in Reflex Regulation of Heart Rate. I. de Burgh Daly and E. B. Verney.—p. 330.
*Influence of Insulin on Mammalian Heart. M. B. Visscher and E. A. Müller.—p. 341.
Two Phases of Heat Production of Nerve. R. W. Gerard.—p. 349.
*Static Effort and Excretion of Uric Acid. R. C. Garry.—p. 364.
Fetal Blood-Gas Tensions and Gas Transfusion Through Placenta of Goat. A. St. G. Huggett.—p. 373.
*Internal Secretions of Ovary: IV. Estrin in Placenta. A. S. Parkes and C. W. Bellerby.—p. 385.
*Nature of Vasodilator Constituents of Certain Tissue Extracts. C. H. Best, H. H. Dale, H. W. Dudley and W. V. Thorpe.—p. 397.

Nature of Aqueous Humor.—Evidence is brought forward by Duke-Elder which suggests that the aqueous humor is a dialysate of capillary blood, in that, when this fluid is equilibrated with arterial blood, its refraction, conductivity and sugar content remain practically unaltered, any change which does occur being in the direction of equilibrium with venous blood. The osmotic pressure of the aqueous is the same as that of a dialysate. It is therefore less than that of the blood, the amount depending on the difference in the colloid content of the two fluids.

Influence of Insulin on Mammalian Heart.—Visscher and Müller investigated the effects of preparations of insulin on the mechanical condition of the mammalian heart, in the heart-lung preparation and in the whole animal, and the oxygen consumption of the heart in the heart-lung preparation. In the heart-lung preparation commercial insulin causes a more or less transitory increase of the power of the cardiac fibers, which appears as a decrease in the ventricular volume necessary to do a given amount of work. The effect is identical in normal and diabetic hearts. In the intact animal, normal or diabetic, a rise in arterial blood pressure follows intravenous insulin injections. There is no direct stimulation by insulin of oxidative metabolism in the isolated heart. After adding blood perfused through the

pancreas to the heart-lung preparation, insulin has no further effect on the heart.

Effort of Exertion on Uric Acid Excretion.—Experiments done by Garry showed that ordinary muscular exertion increases the excretion of uric acid on the day of work, the increase extending into the two following days. The output of total nitrogen is similarly affected.

Estrin in Placenta.—It is suggested by Parkes and Bellerby that the presence of estrin in the placenta is more easily explained on the ground that the placenta withdraws estrin from the maternal circulation to protect the fetuses from its action, than that the placenta elaborates the hormone.

Extraction of Histamine and Choline in Liver and Lung.—Histamine and choline have been isolated by Best et al. from alcoholic extracts of fresh liver and lung, in quantities sufficient to account for the immediate vasodilator activities of those extracts. Histamine is responsible for the greater part of this activity, and is present in remarkably large amount in the extract from lung. The physiologic significance of its occurrence is discussed.

Lancet, London

1: 637-690 (March 26) 1927

*Muscular Mechanism of Respiration. C. Briscoe.—p. 637.
*Cardiac Dyspnea. F. R. Fraser.—p. 643.
Sanocrysin in Treatment of Pulmonary Tuberculosis. A. Morland and E. Zimmerli.—p. 648.
*Experimental Meningo-Encephalitis of Mumps. M. H. Gordon.—p. 652.
Injury to Placenta During Krause's Method of Induction. J. H. Robinson.—p. 653.
*Abdominal Pregnancy. J. Silverstone.—p. 653.
*Erythema Nodosum Following Smallpox. W. L. Tullis.—p. 654.

Muscular Mechanism of Respiration.—Briscoe asserts that the question of stretch governs the order in which muscles will contract and the power they will put into that contraction. The diaphragm is almost the only respiratory muscle worth considering in quiet breathing in animals, and remains the most important in man, though in him it has lost some mechanical efficiency through his orthograde habit. Man is forced to compensate for this relative deficiency of the diaphragm by a greater use of other muscles, these other muscles acting either by active contraction or by persistent tonus of a postural type. If exaggerated these actions are not a normal use of muscle but an abnormal overuse, and in consequence a possible source of trouble.

Cause of Cardiac Dyspnea.—The fundamental cause of cardiac dyspnea, Fraser states, is inefficiency of the myocardium. The clinical features and experimental observations on orthopnea, periodic breathing and paroxysmal dyspnea (or cardiac asthma) are compatible with these conceptions of cardiac dyspnea. Dyspnea may be a dangerous reaction, and in certain cases the direct treatment of it by means of morphine is indicated, but full use of this action of morphine cannot be attained until practical methods of administering oxygen are further developed.

Experimental Meningo-Encephalitis of Mumps.—By the intracerebral injection of a bacteria-free filtrate obtained by passing a gargle from an ordinary uncomplicated case of mumps through the Berkefeld filter, Gordon produced definite evidence of encephalitis in the brain of a monkey.

Abdominal Pregnancy.—Silverstone relates the case of a woman who was said to have had a miscarriage. Two days later she experienced a pain in her left side, and felt a lump in this region about the size of an egg. The lump increased in size and the pain became worse. Some slight rigidity was detected in the left iliac region. There was no vaginal discharge, but there was a suspicion of fulness in the left fornix. The diagnosis of ruptured ectopic gestation was made, and an operation was performed. The left tube was found to be ruptured in almost the whole of its length, and was removed. No trace of the fetus was found. The patient recovered from the operation and did very well for a fortnight. Then suddenly she began to vomit, and it became apparent that she had acute intestinal obstruction. She was operated on again, and a loop of small intestine was found obstructed by a band extending across the brim of the true pelvis. This was divided, and the bowel freed. The left side of the abdomen was about to be examined when a fetus, about 1¾ inches in length, shot out from under the left edge of the wound. A small umbilical cord was present, which led down to a definitely formed placenta. The latter was found to be attached to coils of small intestine, descending colon and omentum.

Erythema Nodosum Following Smallpox.—An unvaccinated girl, aged 6 years, contracted smallpox. In the fourth week, the lesions of erythema nodosum appeared over the extensor aspect of both legs. Careful examination of the child failed to reveal any evidence of rheumatism. The child's general condition appeared good, and there was no sign of either tuberculosis or syphilis. This is the first case of erythema nodosum Tullis has encountered in a series of 1,900 cases of smallpox.

Practitioner, London

118: 137-204 (March) 1927

Effect of Sun, Sea and Open Air in Health and in Disease. H. Gauvain.—p. 137.
Treatment of Tuberculosis of Kidney. F. Kidd.—p. 150.
Technic in Operations on Kidney. T. Rovsing.—p. 164.
*Surgical Treatment of Perforating Peptic Ulcer. G. Söderlund.—p. 171.
*Etiology of Peptic Ulcer. A. C. Douglas.—p. 182.
Treatment of Carcinoma of Mouth. P. J. Moir.—p. 187.
*Friedreich's Paramyoclonus Multiplex: Treatment. J. Reid.—p. 191.
Delivery of Membranes in Normal Labor. F. Keane.—p. 195.

Treatment of Perforating Peptic Ulcer.—Thirty-two cases of perforation of a peptic ulcer are reviewed by Söderlund. In thirty-one of the cases, the perforation took place in a completely free abdominal cavity; in the remaining case, peritonitis was limited to the tract above the transverse colon. Of the thirty-two patients, thirty-one have been dismissed as cured and free of symptoms. Only one patient died. The time between the perforation and the operation was usually short, being, as a rule, only some few hours, and the majority of the patients have been comparatively young; only twelve were 40 years old or upward, but of these one had reached the age of 65, one of 60 and one of 55. The operations in these thirty-two cases were performed by six different surgeons. After the ulcer has been excised, the perforation opening closed and the abdominal cavity irrigated with a solution of warm common salt, a typical Witzel fistula is performed in the front of the stomach. As a rule, the gastrostomy tube can be removed about a week after the operation. The after-treatment is simple. The most important part of it may be said to be morphine injections against pain during the first two or three days, and care that a sufficient quantity of liquid should be administered by rectum or subcutaneously during the period in which the stomach does not empty itself down the intestine.

Etiology of Peptic Ulcer.—Douglas summarizes his views as follows: The gastric mucosa is protected from digestion by its own secretions through a delicately balanced biochemical mechanism, breakdown of which precipitates the formation of "peptic ulcer," and this breakdown is due to a trophoneurosis of toxic origin. The same toxic neurosis, which is probably peripheral, affects also the muscular and glandular mechanisms. The glandular disturbance is usually manifested by hypersecretion, while the muscular disorder shows itself in incoordinate and exaggerated activity, with a high reflex sensitivity to stimulation by free acid. It is obvious, however, that this theory does not negative the possibility of cases occurring with hyposecretion or with muscular atony. The clinical picture presents variations according as to whether the toxic blow falls heavier on one structure or on the other; for instance, if the glands are mostly affected, there may be hypersecretion for some time without ulcer formation; if, on the other hand, the trophic function is profoundly poisoned, the unprotected gastric wall may be digested rapidly and perforate without warning.

Paramyoclonus Multiplex.—On the assumption that there is a hyperovarian or testicular internal secretion in paramyoclonus multiplex, Reid says the treatment resolves itself into ovariotomy complete on one side and partial on the other, or unilateral vasectomy in the male. Paramyoclonus is probably due to a disordered state of the internal secretion of ovary or testis, and is closely related to hysteria, chorea, convulsions, tic and neurasthenia.

Annales de l'Institut Pasteur, Paris

41: 1-81 (Jan.) 1927

Spirochetes of the Cecum. G. Sanarelli.—p. 1.
Pathogenic Property of Fixed Virus. A. C. Marie.—p. 45.
Agglutinability of Micro-Organisms. M. Béguet.—p. 49.
Action of Milk in Preventing Hemolysis. G. S. Joannidès.—p. 59.
Cultivation of Isolated Trichomonas Intestinalis. C. J. Schuurmann and A. Schuurmann ten Bohkel Stuinink.—p. 62.
*Production of a Highly Active Anthrax Antiserum. C. Hruska.—p. 72.

Production of Anthrax Antiserum by Simultaneous Injections of Edema Fluid and Anthrax Virus.—Hruska's experiments were as follows: Horses hyperimmunized against anthrax were injected with anthrax virus in one shoulder. The other shoulder was injected with edema fluid formed in cows at the point of inoculation with anthrax vaccine. The area where the edema fluid was injected presented a much more intense reaction than that where the virus was injected. The serum of hyperimmunized horses thus treated possesses a high therapeutic value. It was employed in three stables in which an anthrax epidemic had broken out. The sick animals recovered, and new cases did not occur.

Archives de Médecine des Enfants, Paris

30: 5-72 (Jan.) 1927

Cases of Mongolian Idiocy. J. Comby.—p. 5.
*Prognosis of von Jaksch's Anemia. E. A. Beretervide and A. Bianchi.—p. 26.
Case of Tortipelvis. J. C. Navarro and A. S. Marotta.—p. 29.

Prognosis of Pseudoleukemic Infantile Anemia.—Beretervide and Bianchi disagree with Roelofs' statement that children with von Jaksch's anemia can be cured with injections of maternal blood and appropriate diet. They are persuaded that the disease is fatal. Alleged cases with recovery presented, they say, nothing else than secondary anemia, probably of syphilitic origin. The diagnosis of von Jaksch's anemia is based essentially on the presence of megaloblasts in the blood. Enlargement of the liver and of the spleen are other important symptoms. Changes in the leukocyte picture may be present or not. Syphilis is a frequent factor in the disease.

Bruxelles Médical, Brussels

7: 373-410 (Jan. 23) 1927

*Search for Tubercle Bacilli in the Feces. P. Corsonello.—p. 173.
Obstetric Shock in a Case of Placenta Praevia. O. Dauwe.—p. 378.
Cardiology and Pathology of the Circulatory System in 1925-1926. F. van Dooren.—p. 383.
Hydatidiform Mole Complicated by Eclampsia. M. Brouha.—p. 387.

Search for Tubercle Bacilli in the Stools, as Diagnostic Method. — Corsonello examined the stools of forty-five patients with pulmonary tuberculosis. In cases in which the tubercle bacillus was found in the sputum, it was almost constant in the feces also. The bacillus was never detected in the stools of healthy persons. It is important to search for tubercle bacilli in the stools in cases of suspected tuberculosis in which expectoration is absent or in which the sputum cannot be obtained, as in infants. Feces containing tubercle bacilli are a possible source of contagion.

Comptes Rendus de la Société de Biologie, Paris

96: 233-304 (Feb. 4) 1927. Partial Index

*Impermeability of the Placenta for Toxins and Antitoxins. L. Nattan-Larrier et al.—p. 241.
*Proper Dose of Toxin for the Dick Test. R. Debré and M. Lamy.—p. 244.
Effect of Suprarenal Extract on Glycemia. M. Labbé and P. Renault.—p. 248.
Action of Marienbad Mineral Water in Diabetes. O. Kauffmann-Cosla and W. Zörkendörfer.—p. 281.
*The Alkali Reserve in the Course of Serum Sickness. J. Chalier and H. Thiers.—p. 283.
*Insulin, Blood Pressure and Glycemia. L. Jung and L. Auger.—p. 287.
*Hyperglycemia from Pilocarpine. A. Le Grand and G. Biérent.—p. 291.
*Influence of Venesection on Peak Metabolism. X. Chahovitch.—p. 298.
*Peak Metabolism in Pathologic Conditions. X. Chahovitch.—p. 299.

Impermeability of Placenta for Toxins and Antitoxins.—Nattan-Larrier, Ramon and Grasset inoculated gravid rabbits with tetanus toxin, and then removed the living fetuses by cesarean section. Blood serum from the mother rabbits and from the fetuses was injected into two series of guinea-pigs. The fetal serum did not cause any marked disturbances, while the maternal serum killed the animals. The experiments were repeated with diphtheria toxin. The results were the same. Other gravid rabbits were given tetanus or diphtheria antiserum. A few hours after delivery, blood was withdrawn from the mother rabbits and from the young. Both blood serums were able to neutralize lethal doses of corresponding toxins. While the placenta is permeable for antibodies or antitoxins, the toxins or anatoxins do not pass through it. This impermeability contrasts with the prompt passage of invisible viruses through the placenta.

The Proper Dose of Toxin for the Dick Test.—In Debré and Lamy's opinion, the dose of toxin commonly used for the Dick test (0.1 cc. of a 1:1,000 or 1:2,000 dilution) may be insufficient. Of twenty-three children with scarlet fever, the Dick test, made with the usual dose, had been positive in twenty-one, negative in two. About 377 persons were tested with a single dose and with a double Dick dose. The results disagreed in seven cases; in twenty-one, the reaction was faint with the single dose and intense with the double dose. In these cases, examination of the blood serum revealed that the amount of antitoxin was small, the immunity insignificant. Such persons are susceptible of contracting scarlet fever.

The Alkali Reserve in the Course of Serum Sickness.—Chalier and Thiers' observations were made on ten persons injected with diphtheria or typhoid antiserum. In those who developed phenomena of serum sickness, the alkali reserve tended to become lower. There did not seem to be any relation between the gravity or clinical type of the serum sickness and the variations in the alkali reserve.

Relations Between Insulin, Arterial Tension and Glycemia.—Jung and Auger estimated the changes in the blood pressure and the blood sugar in eighteen dogs after injections of insulin. They conclude that there is not any correlation between the induced hypoglycemia and the induced hypotension. Successive injections of glucose may suppress the hypoglycemia, or even induce hyperglycemia; at the same time, the hypotension may remain unaffected. A minimal blood pressure may be associated with a very high glycemia. The hypotensive action of insulin does not seem to depend on the induced decrease in the blood sugar.

Mechanism of Hyperglycemia Caused by Pilocarpine.—In LeGrand and Bierent's experience injections of pilocarpine nitrate produced in dogs a high hyperglycemia, lasting for about fifty minutes. In suprarenalectomized animals the same injections induced an unappreciable hyperglycemia, which disappeared rapidly. Evidently the suprarenals share in the mechanism of hyperglycemia.

Action of Venesection on Peak Metabolism and on the Metabolic Quotient.—Chahovitch experimented on pigeons. The peak metabolism was measured in the birds before and after venesection. The latter reduced the intensity of the metabolism, as well as the metabolic quotient. Hence, the thermogenetic property was diminished. In further researches, rats with decreased peak metabolism were found to present a pathologic condition characterized by nutritional disturbances and degeneration of organs. The basal metabolism sometimes remained normal in these animals.

Journal d'Urologie Médicale et Chirurgicale, Paris

23: 5-96 (Jan.) 1927. Partial Index

Prostatectomy Preceded by Cystostomy. Rochet.—p. 5.
*Latent Chronic Prostatitis. J. Perrin.—p. 21.
Cyst of the Prostate. André.—p. 30.
Thrush and Vesical Stone. M. Rafin.—p. 32.

Latent Form of Chronic Prostatitis.—Perrin reports four cases in which chronic inflammation of the prostate was not revealed either by functional symptoms or by urethroscopic examination. In the latent form of prostatitis, the lesions are located chiefly in the interstitial tissue. It happened that this form was observed more frequently than the prostatorrheal form. Slight pain in the perineum or urethra, the appearance of a drop of pus in the urethral orifice, sometimes the presence of orchiepididymitis, suggest the diagnosis. The diagnosis is confirmed only in the course of the treatment. Gonorrhea is the usual cause. The treatment consists in digital massage

of the prostate and the vesicles, repeated three times a week. Each sitting lasts five or six minutes; it is preceded by urethrovesical irrigation with an antiseptic solution. The massage is supplemented by electric effluvation on alternate days. An electrode is placed in the rectum. Cure usually follows in three or four weeks. Recurrences do not take place.

Nourrisson, Paris

15: 1-64 (Jan.) 1927. Partial Index

*Pneumococcus Peritonitis in Young Children. A. B. Marfan and J. Florand.—p. 1.
*Primary Diarrhea in Breast-Fed Infants. H. Slobosiano and E. Munteano.—p. 6.
Pyloric Stenosis in an Infant. Mutel and A. Remy.—p. 18.
Curable Form of Sclerema Neonatorum. Marfan and Hallez.—p. 32.

Pneumococcus Peritonitis in Young Children.—Marfan and Florand describe a case of peritonitis, apparently of tuberculous origin, in a girl, aged 2½. The respiratory signs, the positive tuberculin reaction and the fact that the child had been repeatedly in contact with a tuberculous person tended to sustain the diagnosis. Not before a phlegmon appeared in the umbilical region was the real character of the peritonitis established. The phlegmon, which is characteristic for pneumococcus peritonitis, occurs rarely in tuberculous peritonitis. The phlegmon developed into an abscess; pneumococci were found in the pus in large amounts. Tubercle bacilli were not present. The girl died from complicating perforation of the intestine. The authors believe that roentgen-ray examination would have been a great help in the case. A shadow representing an irregularly distended bladder might have suggested the diagnosis of pneumococcus abscess.

Pathogenesis and Treatment of Primary Diarrhea in Breast-Fed Infants.—Slobosiano and Munteano advocate the use of adsorbing substances in treatment of primary diarrhea in breast-fed infants. The diarrhea may occur from an abnormal amount of lactose in the maternal milk, which is responsible for fermentation and an excessive content of acids in the infant's stools. These acids accelerate the intestinal peristalsis. Adsorbing substances neutralize the intestinal acids. They use a mixture containing water 175 Gm., aluminum silicate and animal charcoal or tricalcium phosphate, 10 Gm. each, ether 2 Gm. and syrup 25 Gm. Two teaspoonfuls of the mixture is given four or five times a day. The intestinal colic disappears soon after the beginning of the treatment; the stools become normal in from three to six days.

Paris Médical

63: 341-356 (April 9) 1927

Note on Acrodynia. M. Péhu and P. Ardisson.—p. 341.
Joint Lesions of Typhoid Origin. H. Schaeffer and R. Liège.—p. 346.
*Resorcin Flocculation Test in Tuberculosis. R. Goiffon and H. Prétet.—p. 349.
Therapeutic Methods in Scabies. Veyrières.—p. 353.

Value of Resorcin Flocculation Test in Tuberculosis.—Goiffon and Prétet employed resorcin in the flocculation test of serums from 200 tuberculous and nontuberculous patients. In the progressive form of tuberculosis, the photometric index of the flocculation was in the zone included between the 15th and 40th degrees. After the tuberculous process became stationary or was cured, the photometric index dropped to normal. In serofibrinous pleurisy, flocculation of the serum was intense in the beginning of the disease; it became unappreciable after resorption of the fluid. In healthy persons, the reaction was always negative. In patients with a nontuberculous disease, the reaction was positive in 9 per cent; this occurred most frequently in those with skin eruptions or with hemorrhages. A curve indicating successive changes in the flocculation test may be valuable in the prognosis of tuberculosis.

Presse Médicale, Paris

35: 465-480 (April 13) 1927

*Roentgenotherapy of Spinal Cord Tumors. R. Ledoux-Lebard and E. Piot.—p. 465.
*Lesions of the Hand from Indelible Pencils. M. Iselin.—p. 467.

Roentgen Rays in Treatment of Tumors of the Spinal Cord.—Ledoux-Lebard and Piot emphasize the value of roentgen rays in diagnosis and treatment of tumors of the spinal cord. Roentgen-ray examination preceded by injection of lipiodol, enables one to locate exactly the seat of the tumor; after operation roentgen rays are used to complete the cure. The field of irradiation should exceed the limits of the region of operation. From 500 to 1,000 Behnken units of deeply penetrating roentgen rays are applied at each exposure; the exposures are repeated at one or two day intervals for three or four weeks. A second series of exposures may be given after a three months' rest. With this method complications have never been observed. In three patients with sarcoma, lymphosarcoma and glioma, respectively, operation supplemented by roentgenotherapy brought about recovery. In one case, the clinical cure is already of three years' standing. In a fourth case, of inoperable angioma, roentgenotherapy used alone resulted in slight improvement.

Lesions of the Hand from Indelible Pencils.—Iselin treated an ulcer of the forefinger, which followed pricking with an aniline pencil. Pricking with an indelible pencil containing methyl violet produces swelling, with a blue discoloration of the skin. If the dye remains long, necrosis of the tissues necessitating amputation of the finger usually occurs. This chemical necrosis is an aseptic one. On operation all dyed tissues should be thoroughly removed. In the case described, incision of the lesion was followed by an atonic ulcer with a serous discharge. After four exposures to ultraviolet rays the ulcer, which had persisted for two months, was healed.

Schweizerische medizinische Wochenschrift, Basel

57: 289-312 (March 26) 1927

Treatment of Fracture of the Radius. A. Brunner.—p. 289.
Diet Before and After Operations. E. Baumann.—p. 291.
Intravenous Administration of Ergotamine Tartrate. M. Wetterwald.—p. 292.
*Carbohydrate Metabolism and Ammonia Formation. A. Gigon.—p. 294.
Skin Disturbances from "Sanocrysin." E. Ramel and L. Michaud.—p. 296.

Carbohydrate Metabolism and Formation of Ammonia in the Blood.—Gigon found that oral administration of ammonium chloride, ammonium carbonate or urea causes not only hyperglycemia, but also lowering of the total carbon and nitrogen of the blood and increase in ammonia. When he injected dextrose into an animal thus treated, the carbon and nitrogen increased to almost normal levels and the blood ammonia promptly decreased. The latter is probably combined with some derivative of the dextrose. It is surprising that the hyperglycemia which occurs after administration of ammonium salts does not produce the same effect. Perhaps the sugar circulates here in a different form. An intravenous injection of urea does not increase the ammoniemia. Urea administered by mouth causes acidosis of the blood; when injected subcutaneously, slight alkalosis results.

Policlinico, Rome

34: 415-450 (March 21) 1927

*Nongonorrheal Vaginitis. L. Tommasi.—p. 415.
General Paralysis in Sicily. V. Cuccia.—p. 421.
Meningitic Form of Pernicious Malaria. E. Garrone.—p. 426.

34: 451-486 (March 28) 1927

Dispensary for Prevention of Rabies. V. Puntoni.—p. 451.
Foreign Bodies of the Respiratory and Digestive Tracts. F. Lasagna.—p. 454.
Mediastinal Lymphosarcoma. M. Martinelli.—p. 456.
Manual Separation of Pleural Adhesions. G. Luzzatto-Fegiz.—p. 459.

Nongonorrheal Vaginitis in Children.—Tommasi is convinced that it is frequently difficult to affirm or deny the gonorrheal nature of vaginitis in children. A negative result on microscopic examination does not solve the problem and apparently positive reports do not prove gonorrhea beyond doubt—especially if the examination is made by a practitioner. The urethra is involved in more than 90 per cent of the cases of true gonorrhea. The disease is acute and gonococci are present in pure culture in the beginning. The inflammation invades the entire vagina—not only its lowest part.

Riforma Medica, Naples

43: 241-264 (March 14) 1927

Motor Function of the Stomach. F. Battistini.—p. 241.
New Colonic Reflex. U. Baccarani.—p. 247.
Sedimentation Test in Appendicitis. A. Violato.—p. 248.

Treatment of Enteritis. C. Pacelli.—p. 260.
Sulphur Treatment of Malignant Tumors. D. Campanacci.—p. 262.

43: 265-288 (March 21) 1927

Deferring Old Age. A. Ferrannini.—p. 265.
Treatment of Acute Appendicitis. D. Giordano.—p. 266.
Physical Chemistry of Effusions. G. Melli—p 269
Primary Tuberculosis of the Breast. M. d'Arrigo.—p. 271.
*Syphilis in the Third Generation. M. Rega.—p. 281.
Vesalius. D. Barduzzi.—p. 284.

Syphilis in the Third Generation.—Rega's patient had syphilis of the liver—this was apparently a case of syphilis in the third generation. He recovered after specific treatment.

Archivos de Endocrinología y Nutrición, Madrid

4: 253-300 (Nov.-Dec.) 1926

*The Blood Sugar in Muscular Atrophy. G. Marañón.—p. 253.
Renal Diabetes. E. Carrasco Cadenas.—p. 262.
*Acid-Basic Balance in Diseases of the Thyroid. J. Morros Sarda.—p. 279.

Induced Glycemia in Muscular Atrophy.—In four cases of progressive muscular atrophy, Marañón studied the blood sugar, fasting and half an hour and one hour after peroral administration of 25 Gm. of glucose in 200 cc. of water. In all, the sugar metabolism exhibited a prediabetic lack of balance. The extent of the induced hyperglycemia paralleled that of the atrophic process.

Acids and Bases in Diseases of the Thyroid.—Morros found a low alkali reserve in the blood plasma in nine cases of hyperthyroidism. The figures were normal in a case of hypothyroidism. The existing acidosis did not bear any relation to the severity of the clinical condition nor to the basal metabolism. These observations support those of Walinski and Herzfeld and contradict those of de Cires and Silva. Morros plans to try thyroid medication in normal persons to see if the alkali reserve will decrease. Insulin and alkalis are also being tried in his cases of hyperthyroidism.

Archiv für Gynäkologie, Berlin

129: 459-1080 (Jan. 31) 1927

*The Endometrium During Menstruation. P. Bohnen.—p. 459.
Colloid Chemical Studies of the Lower Segment of the Uterus. K. Lundwall.—p. 473.
Pseudoluxation of the Knee-Joint and Luxation of the Foot as Birth Injuries. A. Szenes.—p. 482.
Gonorrhea and Puerperium. L. Bodnar.—p. 506.
*The Myoma Ovary. L. Kraul. —p. 526.
*Intermediary Fat Metabolism in Pregnancy. O. Bokelmann and A. Bock.—p. 541.
*Menstruation and Pregnancy in Kyphoscoliosis. E. Klaften.—p. 550.
Infant Mortality and Use of Forceps. O. Pritzi.—p. 592.
Capacity of the Intervillous Space of the Human Placenta. P. Jonen. —p. 610.
Cases of Spontaneous Rupture of the Cord. I. Schereschewsky.—p. 620.
Tar Cysts of the Ovary. O. Brakemann.—p. 632.
Syncytioma Malignum of the Tube After Extra-Uterine Pregnancy. P. Klein.—p. 662.
Fibroma of the Chorion and Holoacardius Amorphus. W. Nitschmann. —p. 674.
Clinical Importance of Hydrogen Exponents. H. Sellheim.—p. 683.
Syphilis of the Fetus and Placenta. G. Raschhofer.—p. 696.
Frequency of Univitelline Twins. H. Orel.—p. 719.
*Lactic Acid of the Blood During Pregnancy and Labor. O. Bokelmann. —p. 726.
*Ovarian Hemorrhages. J. Berecz.—p. 736.
*Influence of Ovarian Function on Basal Metabolism. A. Heyn.—p. 760.
*Anemia of Pregnancy of Pernicious Type. P. Esch.—p. 788.
Lactic Acid of the Blood in Toxicosis of Pregnancy. O. Bokelmann.—p. 802.
*Comparative Studies on the Biology of the Vagina. W. Bremicker.—p. 807.
*Biology and Chemism of the Vagina in Pregnancy. R. Kessler and E. Uhr.—p. 844.
*Biology of the Vagina in Childhood. R. Kessler and H. D. Röhrs.—p. 856.
Mesodermal Mixed Tumors of the Uterus. A. Gamper.—p. 878.
*Late Results of Eclampsia. H. Nevermann.—p. 891.
*Vaginal Secretion During Menstruation. R. Demme and U. Baltzer.—p. 900.
*Bacteriology of the Vagina. R. Demme.—p. 913.
*Postoperative and Puerperal Thrombosis and Embolism. P. Schumacher. —p. 929.
*Idem. R. T. von Jaschke.—p. 951.
Interfereometric Studies of Endocrine Disturbances. K. Hellmuth.—p. 965.
Genesis of Acidosis of Pregnancy. O. Bokelmann.—p. 987.
*Roentgen-Ray Diagnosis of Pregnancy. M. Leiser.—p. 1036.
Eclampsia and Vagotonia. N. Louros.—p. 1049.
*Etiology of Eclampsia. N. Louros and Schmechel.—p. 1060.

The Shedding of the Endometrium During Menstruation.—The material studied by Bohnen represents the collection of many years. He found that the individual phenomena varied in different women and in different menstruations in the same woman, but that Schröder's conception of the functionalis (compacta and spongiosa) was confirmed and that menstruation is characterized anatomically by a shedding of the spongy and compact layers of the mucosa down to the basal membrane.

The Myoma Ovary.—Kraul made histologic studies of the ovaries of women with uterine myomas. The changes found corresponded to an intensification and lengthening of functional activity and were attributable to the pelvic hyperemia caused by the myoma. They bore an analogy to the changes present during pregnancy, but were less pronounced. The entire ovary was increased in size and turgescent; the corpora lutea were particularly large and well nourished; the theca interna was hypertrophied; hyaline degeneration was postponed. These changes were found chiefly in connection with submucous or centripetally growing intramural myomas. The effort made by the uterine muscle to expel these growths brings an increased amount of blood to the region and results in pelvic hyperemia.

Intermediary Fat Metabolism and Pregnancy.—Under normal nutritional conditions, there is a slight increase in the acetone bodies in the blood in physiologic pregnancy and it appears that acidosis in pregnancy is largely determined by these substances. Bokelmann and Bock found that in pregnant women, in contradistinction to nonpregnant women, a slight overamount of fat in the diet, the quantity and quality of carbohydrates remaining unchanged, was followed by increase in the acetone body index. They believe that endogenous metabolic processes are responsible.

Menstruation and Pregnancy in Kyphoscoliotic Women.—In severe kyphoscoliosis the onset of menstruation is likely to be retarded. Other signs of ovarian hypofunction are also common. The reason may lie in deficient blood supply due to interference with the circulation, caused by the structural deformity, or endocrine disturbances may be responsible for both conditions. The prognosis of pregnancy and labor depends largely on the condition of the lungs and heart. The heart requires special care. The greatest number of deaths take place late in the puerperium and are caused by bronchitis and pneumonia. Klaften analyzes the course of pregnancy and the puerperium in seventy-six cases. In sixty-one delivery took place at term; spontaneous abortion occurred in six; in six further cases pregnancy was interrupted because of decompensation; labor was induced prematurely in three; in one case supravaginal hysterectomy was performed.

The Lactic Acid of the Blood in Pregnancy and Labor.—In forty-eight normal nonpregnant women the average lactic acid content of the blood was found to be 17.3 mg. per hundred cubic centimeters. In fifty examinations of the blood in physiologic pregnancy, from the second month to term, the average was 20.8 mg. per hundred cubic centimeters. In the first stage of labor, the average in nine cases was 24.3; in four cases in the second stage the average was 44.9; in five cases immediately after the birth of the child, 45.6 mg. per hundred cubic centimeters. The increased concentration in pregnancy and labor may mean that oxidation of lactic acid to carbonic acid and water is hindered, or that resynthesis to glycogen is disturbed. In a further study Bokelmann found that the lactic acid content of the blood in toxemia of pregnancy was higher than in normal pregnancy; in one case (preeclamptic) it reached 36.1 mg. per hundred cubic centimeters. In manifest eclampsia it was still higher, in one case 68.4, and during labor (first stage) in eclampsia it reached 81.9 mg. He lays emphasis on the fact that the high lactic acid concentration in eclampsia is the result, not the cause, of the convulsions and points out that the acetone body acidosis in hyperemesis is likewise a symptomatic acidosis.

Ovarian Hemorrhages.—The ovary has a tendency to bleed, on account of its vascularity and of the opportunity afforded

each month with the bursting of the follicle. Hyperemia of the genital organs, whether of physiologic or unphysiologic origin, nutritional disturbances and infections are etiologic factors. The pathologic importance of these hemorrhages depends on their site and extent. Bleeding into the abdominal cavity usually forms a retro-uterine hematoma, but in rare cases it has proved fatal. Berecz examined the ovaries removed at operation in 1,059 cases and found signs of hemorrhage in 108 cases. In only twelve had the bleeding produced symptoms. In these the symptoms resembled those of tumor, extra-uterine pregnancy, appendicitis or torsion of the pedicle of an ovarian cyst. The course may be acute or chronic. Small hemorrhages do not require treatment. Conservative treatment directed toward a supposed inflammatory process often succeeds. Uterine myoma, ovarian tumor or retroflexion of the uterus is usually found with ovarian hemorrhage; if on operation for one of these conditions a hematoma is found, the entire ovary should be removed, since it no longer contains functioning tissue. If in the course of any operation hemorrhagic foci or either cysts or a corpus luteum on the point of rupturing are discovered, they should be excised to avoid hemorrhage, for which the circulatory disturbance consequent on the operation might give the occasion.

Influence of Ovarian Function on Basal Metabolism.—Basal metabolism was not found to be affected by the menstrual cycle in healthy women or by dysmenorrhea. High grade ovarian insufficiency (primary amenorrhea) was accompanied by a decrease of about 10 per cent. The decrease was slight and inconstant in the lower grades of ovarian insufficiency. In about 25 per cent of the cases of hemorrhagic metropathy, the basal metabolism was increased more than 10 per cent. In about 50 per cent of women with myoma, it was increased from 10 to 20 per cent. Castration was followed in 25 per cent of the cases by a distinct decrease, which, however, proved temporary, being present from two to three months after the castration, but disappearing after from six to nine months. In the other cases the rate was normal. In women in the natural menopause, the rate varied in both directions; in some cases it rose as much as 10 per cent. By ovarian preparations it was possible to raise the metabolic rate of castrated women with decreased metabolism to normal, but not above normal. Heyn regards the influence of the ovaries on metabolism as secondary, through its action on thyroid function. In amenorrhea he sees the result of insufficiency of the endocrine system, not of one gland alone.

Anemia of Pregnancy of Pernicious Type.—The differential diagnosis from true pernicious anemia can be made only in the cases that survive and by the fact that they go on, without remissions, to permanent recovery. Leukopenia and glossitis are usually absent. The disease begins in the second half of pregnancy and improvement cannot be looked for while the pregnancy continues. The birth is usually premature, rapid and attended with little loss of blood in the third stage. Pain is slight. These peculiarities are connected with the lack of oxygen in the blood. After the birth the woman becomes suddenly worse and dies or she begins to improve. Improvement may be slow or startlingly rapid. Esch has had six cases with three cures. He does not believe sterilization to be indicated. The question of interrupting the pregnancy must be decided individually for each case: on principle it is justified.

Comparative Studies on the Biology of the Vagina.—Bremicker reviews the literature on the histology and bacteriology of the vagina in various species of mammals and reports his own studies on a large number of animals. The normal vagina of the cow, hog, sheep, guinea-pig and rabbit contains no bacteria. The reaction is in general alkaline. The glycogen metabolism, present in the human species, is absent and the quantity of glucose is small. Attempts at infection in the rabbit, cow and guinea-pig showed that the vagina of these animals possesses the power of self-cleansing in a high degree, but this power is connected with the cells of the lining rather than with the secretion. In the long-tailed monkey the reaction was found to be slightly acid, *Bacillus vaginalis* was present in large numbers, glucose was present in the same quantity as in the human species and glycogen was present in the wall.

Biology and Chemistry of the Vagina in Pregnant Women.—In the vagina of the pregnant woman, Kessler and Uhr found an increased effort at self-cleansing, manifested in high acidification and relatively high glucose values. An acidity represented by p_H 4 in a glucose medium of from 2 to 4.5 per cent guarantees normal biologic conditions, from which a smooth puerperium may be expected.

Biologic Studies of the Vagina in New-Born Infants and in Little Girls.—Kessler and Röhrs found it impossible to obtain dependable material for bacteriologic cultures in the case of living children, but their researches brought out the following facts: for the first few hours after birth the vagina is sterile; thereafter *Bacillus vaginalis* is found and this continues throughout childhood as the sole physiologic microorganism of the vagina. The biologic conditions in the child's vagina are the same as in the sexually mature woman's. Twelve hours after birth the p_H of the vaginal secretion was 5; during the next few days, from 4 to 4.5; at the end of two weeks from 5 to 6. In the strong, healthy child of a few months old, it is again between 4 and 4.5. The quantity of the secretion and the appearance of the vaginal contents depend on ovarian function, but this is not true of the acidity.

The Fate of the Eclamptic Patient.—Sixty eclamptic patients were examined after an interval of from one to twenty-three years. Twenty-seven did not complain of any symptoms nor present changes attributable to the eclampsia. Thirty made various complaints, in which severe headache and weakness of memory predominated. In three who did not make any complaint, careful examination revealed lesions that were probably the result of the eclampsia. Most of the symptoms were due to injury to the central nervous system. Edema of the legs was present in five cases. Chronic nephritis was not found in any case. There is some evidence that the renal changes, which often persist for a long time after recovery from eclampsia, are nephrotic changes in the tubules. For the high blood pressure frequently seen during the first few years, changes in the blood vessels and vasomotor apparatus are responsible. Since their eclampsia, eight of the women had gone through one normal pregnancy, one had gone through five, one had had two normal pregnancies and six abortions. Four of the women had suffered from edema during pregnancy, two from nephropathies. There was recurrence of eclampsia in four women, in one in each of two later pregnancies; one had had one delivery with eclampsia and one normal delivery. The other two had each had a number of abortions in addition to one delivery with eclampsia.

Biologic Chemistry and Bacteriology of the Vaginal Secretion During Menstruation.—In all of the fifty cases examined by Demme and Baltzer, the acidity of the vaginal secretion underwent a very considerable decrease during menstruation and the vaginal flora deteriorated. The changes persisted for a number of days after the menstruation ceased. These conditions, which represent lowered resistance to pathogenic bacteria, are in accord with the clinical experience of former times and justify the efforts, expressed in the folkways of various races, to protect the menstruating woman from genital contamination.

The Micro-Organisms of the Vagina and the Power of the Latter to Cleanse Itself.—Demme investigated the acid-forming capacity and the acid tolerance of various bacteria. For each variety the limit of tolerance was found to correspond to the maximum production. He gives a table showing the figures for different varieties of the streptococcus, staphylococcus, *Bacillus coli, Bacillus vaginalis* and others, and points out that the limit of acid tolerance of all the clinically pathogenic bacteria lies below the average acidity of the normal vaginal secretion of women with healthy genital organs, while the limit of tolerance of the normal inhabitant of the vagina, *Bacillus vaginalis,* is far above it. The capacity of bacteria to form acids and the high acid tolerance of the *Bacillus vaginalis* are the main factors in the self-cleansing power of the vagina. The alkaline secretion of the cervical mucous membrane and the alkaline tissue fluid produced by autolysis of the epithelial cells shed by the vaginal wall are, however,

necessary to keep the acidity of the vaginal contents below the point at which the *Bacillus vaginalis* itself would succumb.

Causes of Postoperative and Puerperal Thrombosis and Embolism.—Schumacher analyzes the material of Jaschke's clinic from 1918 to 1925. Conditions favoring general retardation of the circulation, such as cardiovascular disturbances, adiposity and postoperative pulmonary disease, were present in more than half of the cases of postoperative thrombosis of the deep veins of the leg and in 70 per cent of the cases of postoperative embolism. A causal connection between retardation of the blood stream and the occurrence of thrombosis in a varix or a superficial vein of the leg could not be definitely established. In the cases of puerperal thrombosis and embolism, a clinically demonstrable general slowing of the circulation was not frequent, but the conditions favoring retardation of the venous flow in the lower extremities were present in exceptional degree. Vaginal operations showed a special tendency to be followed by embolism. Manual separation of the placenta and tamponade of the uterus favored thrombosis and embolism. Infection was present as a factor in about 63 per cent of both postoperative and puerperal thrombosis of deep veins and in 55 per cent of the cases of postoperative embolism. He believes there is less danger of thrombosis and embolism with spinal than with chloroform or ether anesthesia. Jaschke emphasizes the preponderant rôle of retardation of the blood stream in the causation of thrombosis and embolism and urges that the surgical and obstetric patient be got out of bed early. He recommends active and passive motions of the arms and legs and "respiratory gymnastics," begun on the day of operation and carried out energetically, at least four times a day in the case of the movements and every five or ten minutes, if possible, in the case of the breathing exercises. He warns, however, that if the heart muscle is in bad condition or if the veins are sclerotic, early getting up and too vigorous gymnastics and massage may do harm. He practices systematic digitalization of the heart before operation.

Roentgen-Ray Diagnosis of Pregnancy.—Leiser has found that pregnancy can always be diagnosed with the roentgen ray from the fourteenth week. He discusses the technic and reading of the films. He does not use pneumoperitoneum, because of the risk of setting up uterine contractions.

Experimental Studies on the Etiology of Eclampsia.—In studies which included artificial dilatation of the blood vessels in the region of the uterus in rabbits, Louros and Schmechel believe that they have proved the causal connection between vagotonia and eclampsia. They maintain that the vagal predominance is caused by defective metabolism of proteins, fats and mineral salts and by disturbance of the acid-base equilibrium, and that the ovum itself, together with the woman's constitution, is responsible for the inability of the pregnant woman to maintain metabolic equilibrium. The sperm also seems to have an influence. The therapeutic conclusion is that a superabundance of protein, fat, salt or water is to be avoided in the diet of the pregnant woman.

Archiv für klinische Chirurgie, Berlin

144: 1-243 (Jan. 29) 1927

Fistulas and Suppuration Around Ligatures After Operation for Goiter. G. Eichelter.—p. 1.
The Flow of Bile After Cholecystectomy. J. Vigyázó.—p. 18.
Surgery of the Gallbladder and Bile Ducts. O. Orth.—p. 31.
Regeneration of Vessels in Joint Tuberculosis. M. Jakob.—p. 43.
*Survival of Tissues in the Oxygen Chamber. E. Liek.—p. 56.
*Fulminating Osteomyelitis. F. Schürer-Waldheim.—p. 65.
Carbon Dioxide Snow Treatment of Acute Inflammatory Processes in the Skin. F. Kroh.—p. 77.
Duodenal Stenosis from the Clinical Standpoint. R. Janker.—p. 101.
Late Results of Operation for Appendicitic Abscess. F. Schück.—p. 115.
Pneumocephalus and Liquorrhoea Nasalis After Skull Fracture. T. Eggers.—p. 121.
Congenital Defect of the Pectoral Muscle and Accident. E. Melzner.—p. 131.
*The Sex Cycle and Breast Tumors. L. Moszkowicz.—p. 138.
Position and Ligamental Apparatus of the Stomach. A. S. Maksimowitsch.—p. 162.
Combined Musculoplasty in Paralysis of the Deltoid. E. P. Burzewa.—p. 186.
*Intra-Abdominal Pressure and Surgery of the Stomach. N. J. Krause.—p. 201.
*Insulin Treatment of Postoperative Acidosis. E. L. Beresow et al.—p. 222.
A Case of Enterocystoma. M. Iolkin.—p. 238.

Survival of Tissue in the Oxygen Chamber.—Liek removed bone and tissue of other organs from rabbits, kept the tissues in oxygen tubes for from one to fourteen days and then implanted them in the omentum or muscle of the donor animal. After a number of days, the animal was killed and the implant examined. Control experiments were made. It was found that many organs beside bone survive explantation for a surprisingly long time, and that the length of survival was increased by exposure to oxygen. This was true of the thyroid, ovary, testis and salivary glands.

Acute Osteomyelitis of Rapidly Fatal Course.—Six cases are described. In all the exciting cause was the staphylococcus pyogenes aureus. A portal of entry in the skin was demonstrable in two cases and Schürer-Waldheim thinks it probable that *Staphylococcus aureus* always enters from the skin, while other micro-organisms favor other portals. The patients were children between 3 and 15 years old. It is particularly pointed out that the earliest death did not occur until seventy-two hours after the onset; therefore, even in fulminant cases there is time for treatment, if the diagnosis is promptly made. Early operation, combined with vaccine treatment, is urged. If the disease is not recognized until late, all treatment is useless. Abscesses and infarcts were found at necropsy in the lungs, heart muscle, liver and kidneys.

The Sex Cycle and Tumors of the Breast.—Moszkowicz studied the tissue changes in the mammary gland that occur in connection with dysfunction of the ovary. The frequency of hyperplasia among these is noticeable. Adenoma, fibroadenoma, cyst-adenoma, etc., arise, he affirms, from disturbed ovarian function. The same cause may be responsible for chronic conditions of irritation, preparing the ground for carcinoma.

Intra-Abdominal Pressure in Relation to Surgery of the Stomach.—Krause studied on the cadaver and on models the conditions governing maintenance of position of the stomach when the body is upright, and made bedside observations on the results of influencing intra-abdominal pressure. The distribution of pressure within the abdominal cavity depends on the mechanical structure of the walls and is governed entirely by the reciprocal relations of the bony skeleton and the flexible wall. It is caused by the elastic tension of the abdominal musculature. Concavity signifies negative pressure, convexity positive pressure. In the subdiaphragmatic space negative pressure is inevitable, in the upright position of the body. Under negative pressure a hollow organ becomes distended and a relatively greater muscular energy is required to contract its walls. Inside the stomach, Krause asserts, a pressure equal to the atmospheric pressure is maintained by active contraction of the stomach wall, but when this wall is relaxed, as in atony, the fundus falls mainly under the influence of negative pressure, and the physiologic fixation of the organ is disturbed. Purging and fasting before operation disturb the intra-abdominal equilibrium and favor negative pressure in the epigastrium. When signs of negative pressure in the upper abdomen, such as sinking in of the epigastrium, appear after operation, the pelvis should be raised. He has seen the symptoms of early postoperative dilatation of the stomach disappear promptly when the patient's pelvis was raised.

Treatment of Postoperative Acidosis.—Beresow, Kuchowarenko and Lifschütz believe that hormones are probably the cause of the temporary disturbance of carbohydrate metabolism which appears after operations, and that the pancreas plays an important part here. Hence, insulin is the appropriate remedy. Preventive treatment was tried in eighteen unselected cases; in four the anesthetic was chloroform, in the others procaine hydrochloride. On the day before the operation 400 cc. of a 5 per cent solution of dextrose and 10 insulin units were injected intravenously. On the day after operation 10 insulin units without dextrose was given to some of the patients. On the other days insulin was given after a glass of sweetened tea. Acetonuria occurred

in only one patient, a girl, aged 10, after appendectomy under chloroform. It lasted one day. Therapeutically the treatment was given in four cases of postoperative acidosis with severe acetonuria and in one case of latent acidosis. In these cases all the symptoms subsided on the day of treatment, except that in one the acetonuria continued into the next day. In three cases of surgical shock with high blood sugar, treatment with 20 insulin units and 500 cc. of a 5 per cent dextrose solution was followed by gradual subsidence of symptoms, beginning one half hour after administration; in one case 10 insulin units sufficed. Seven cases of resection of the stomach for cancer (cachexia and high grade anemia) were treated for two or more days before operation with large doses of glucose and daily injections of 10 insulin units. The treatment was continued for four or five days after operation with varying amounts of glucose, and with drop proctoclysis to offset the diuretic action of the insulin. After five days large amounts of glucose were given and the insulin stopped. The results were excellent.

Deutsches Archiv für klinische Medizin, Leipzig

154: 97-256 (March) 1927

*Arginine in Cystinuria. F. A. Hoppe-Seyler.—p. 97.
*Metabolism of Minerals. C. and M. Oehme and H. Wassermeyer.—p. 107.
Mechanism of the Semilunar Valves. M. Hochrein.—p. 131.
*Diameter of Erythrocytes in Endocrine Diseases. G. Holler and O. Kudelka.—p. 165.
*Idem in Diseases of the Pancreas. G. Holler and O. Kudelka.—p. 172.
*Fatty Substances in Benzene Poisoning. N. Schustrow and F. K. Letawet.—p. 180.
*Kations and Anions of Serum. W. H. Jansen and A. M. Loew.—p. 195.
Acetonitril Test in Persons with Vegetative Stigmata. R. Salomon.—p. 221.
Determination of Urobilinogen. A. Adler.—p. 238.
Action of Choline on the Circulation. E. Schliephake.—p. 249.

Arginine in Cystinuria.—Hoppe-Seyler isolated arginine from the urine of a patient with cystinuria. He claims that this is the first time that its presence in such a case has been established.

Metabolism of Minerals.—Oehme and Wassermeyer found that the mineral balance depends not only on the added salts, but also on the basic food. Antagonistic actions are found, but absolute amounts of the salts are also important. For instance, on a diet poor in calcium and phosphorus, sodium chloride will cause a negative balance, potassium chloride a retention of these minerals. Sodium chloride may shift the acid-alkali balance toward either side—according to the basic diet. The action of the bicarbonates of sodium and of potassium on the chlorine balance depends on the sodium-potassium ratio of the food.

Diameter of Erythrocytes.—Holler and Kudelka found the average diameter of erythrocytes increased in chronic pancreatitis. It is, as a rule, decreased in diabetes and in disturbances of the thyroid. Only rarely is the diameter increased in the latter group.

Fatty Substances in Benzine Poisoning.—Schustrow and Letawet continued their experiments on the relation of fats and lipoids to benzine poisoning. They conclude that the lowered amount of cholesterol in the blood protects against the action of benzine. They believe that a fatty diet is injurious in such subjects.

Kations and Anions of Serum.—In a large material Jansen and Loew determined the sodium, potassium, calcium, magnesium, chlorine, phosphorus, sulphur and carbon dioxide content of normal serums.

Deutsche medizinische Wochenschrift, Berlin

53: 517-558 (March 25) 1927

*Predisposition and Nutrition. T. Saiki.—p. 517.
*Treatment of Hemorrhoids. I. Boas.—p. 519.
Treatment of Cancer. P. Lazarus.—p. 521. C'cn.
Paratyphoid Problem. M. Müller.—p. 524.
Insulin Treatment of Underweight Tuberculous Patients. R. I. Lepskaja and L. M. Rachlin.—p. 527.
*Temperature Sense. H. Hahn.—p. 528.
Action of Mineral Earths. R. Meissner.—p. 530.
Treatment of Syphilis. A. Buschke and E. Langer.—p. 531.
Treatment of Syphilis of the Circulatory Apparatus. N. Jagić.—p. 535.
Treatment of Syphilis in Pregnancy. H. Runge.—p. 536.
Treatment of Syphilitic Infants. J. Cassel.—p. 538.
Encephalitis. E. Siemerling.—p. 539.
Advances in Roentgenology. A. Lorey and A. Wierig.—p. 541.
Technical Novelties. M. Schütz.—p. 542.

Predisposition and Nutrition.—Saiki reviews the investigations made in his institute by various workers. Strychnine has less effect on avitaminotic (A, B and C) animals than on controls. Renal and biliary calculi form in animals on a diet that does not contain vitamin A and calcium or phosphates. Administration of vitamin A caused disappearance of renal calculi formed under these conditions (roentgen-ray control). Hyperkeratosis, papillomas and cancer develop in white rats on a diet lacking in vitamin A except for small amounts given from time to time to prevent death. Wounds heal quicker under administration of vitamin A. While corned beef does not impair fecundity, canned salmon, given as the only source of protein, results in maldevelopment of offspring. Administration of fried eels causes sterility.

Treatment of Hemorrhoids.—Boas aspirates internal hemorrhoids with Bier's pump and injects from 0.5 to 2 cc. of absolute alcohol into the varicosities. He uses local anesthesia obtained by rectal injection of 50 cc. of a 0.5 per cent solution of procaine hydrochloride with epinephrine. The injected nodes are replaced immediately. With external hemorrhoids the treatment is usually followed by gangrene and the healing takes longer (from eight to ten days). In acute strangulation of hemorrhoids he abstains from treatment. The condition is not dangerous and leads to spontaneous recovery. He does not treat bleeding hemorrhoids in patients with hypertension, because he found that in some the blood pressure increased after the treatment.

Temperature Sense.—Hahn found that the sum of the temperature to which the skin is adapted and of the minimum increase in temperature necessary to produce a sensation of heat is within certain limits a constant (about 34 C.). For instance, a skin adapted to 33.5 C. feels the increase of 0.3 to 0.1 C. When it is adapted to 30 C. it requires 4 C. and at 10 C. fully 24 C. are necessary to produce a sensation of heat. There are some phenomena which might be best explained by the presence of different nervous elements responding to different temperatures.

Klinische Wochenschrift, Berlin

6: 529-576 (March 19) 1927

*Dynamic Examination of the Pulse. H. Straub.—p. 529.
*Antirachitic Vitamin. F. Holtz.—p. 535.
Problem of Neurosis. F. Kraus.—p. 537.
*Diabetes Refractory to Insulin. H. Häusler and F. Högler.—p. 541.
Registration of Electrocardiogram. E. Mosler and W. Gaarz.—p. 543.
Experiments in Protein Treatment. A. Wolff-Eisner.—p. 545.
*Acetone Bodies in the Blood. O. Bokelmann and A. Bock.—p. 549.
*Ovarian Grafts and Reticulo-Endothelial System. W. Arnold.—p. 551.
Different Forms of Nevus. Meirowsky and Leven.—p. 552.
*Water Metabolism and Antagonism of Spleen and Thyroid. L. Asher and K. G. Dieticker.—p. 552.
Supravital Staining of Erythrocytes. E. Maurer and D. Mileff.—p. 552.
Determination of Atropine in Nightshade Poisoning. R. Meier.—p. 554.
Nontuberculous Pulmonary Hemorrhages. E. Scheidemandel.—p. 554.
Housing Conditions of Large Families. R. Engelsmann.—p. 557.
Timing Apparatus for Clinical Tests of Muscles. E. Blumenfeldt.—p. 573.
*Cure of Hay-Fever. Hamm.—p. 574.

Dynamic Examination of the Pulse.—Straub discusses critically the underlying principles and the clinical results of Sahli's sphygmobolometry. He refuses to accept any part of it.

Antirachitic Vitamin.—Holtz reports on the teamwork done by Windaus, Pohl and himself in Göttingen, Hess in New York and Rosenheim in London. The substance which absorbs the ultraviolet spectrum and which they identified with the provitamin D was isolated from fungi and called ergosterol. It is a sterol with three double bindings and its absorption spectrum disappears after irradiation. Doses of 0.001 mg. prevented rickets in rats.

Diabetes Refractory to Insulin.—Häusler and Högler made experiments with the blood from a diabetic patient who was not influenced by insulin treatment. While the blood plasma

from other diabetic patients inhibits the fixation of dextrose to erythrocytes, no such inhibiting action was present in the blood plasma from this patient. On the other hand, the patient's corpuscles did not accept more dextrose after addition of insulin, until they had been repeatedly washed. They conclude that diabetes of this type is not due to an insufficiency of the islands of the pancreas. It seems that it is due to the inability of tissue cells to respond to the action of insulin.

Acidosis in Vomiting of Pregnancy.—Bokelmann and Bock found from 60 to 100 mg. of acetone bodies per hundred cubic centimeters of blood in light cases of vomiting of pregnancy. In grave cases the concentration rose to from 100 to 400 mg.

Ovarian Grafts and the Reticulo-Endothelial System.—Arnold found complete resorption of ovarian grafts in rabbits. It made no difference whether the animals had been injected previously with trypan blue (to "block" the reticulo-endothelial system) or not.

The Spleen and Water Metabolism.—Asher and Dieticker found increased water metabolism in splenectomized animals. They believe that the spleen checks the hyperactivity of the thyroid.

Treatment of Hay-Fever.—Hamm treats hay-fever with intranasal diathermy.

6: 577-624 (March 26) 1927

Alcohol Psychoses. M. Rosenfeld.—p. 577.
Irradiated Ergosterol. P. György.—p. 580.
*Action of Anorganic Iodine. I. Abelin.—p. 584.
*Lactic Acid Fermentation of Surviving Tissue. A. Loeser.—p. 587.
Malaria Treatment of Neurosyphilis. G. L. Dreyfus and R. Hanau.—p. 590.
Pneumonephrography in Chronic Pyuria of Infants. J. Jahr and W. Hirsch.—p. 595.
*Glycocoll Treatment of Hives. K. Glaessner.—p. 597.
Causes of Premenstrual Acidosis. A. Szarka and O. Waldbauer.—p. 599.
Bromine in Blood and Cerebrospinal Fluid. J. Barnewitz.—p. 600.
Experiments on Herpes. E. Gildemeister and K. Herzberg.—p. 603.
Diagnosis of Univitelline Twins. P. J. Waardenburg.—p. 603.
*Physiology of Contractions of the Ureter. H. Rothmann.—p. 603.
Cause of Onset of Labor. H. Knaus.—p. 604.
*Coloring the Cornea with Gold Chloride. H. Kottenhahn.—p. 604.
The Sedimentation Test. J. Popp and M. Grünbaum.—p. 605.
*Inhibition of Bacteria in the Small Intestine. L. Arnold.—p. 607.
Bilirubin Colorimeter. E. Meulengracht.—p. 623.
Reagent for Urochromogen, Bilirubin and Urobilinogen. M. Weiss.—p. 623.

Action of Anorganic Iodine.—After repeated failures with addition of iodine to the water in which he kept axolotls, Abelin succeeded in obtaining their metamorphosis by intraperitoneal injections of diluted Lugol's solution. He believes that a compound of iodine with the animal's protein is the active substance.

Lactic Acid Fermentation of Tissues.—Loeser confirms Warburg's results. Living young placenta tissue seems to produce lactic acid even under aerobic conditions. He concludes from some of his experiments that it also has this fermentative action in vivo.

Glycocoll Treatment of Hives.—Glaessner had good results in urticaria—especially in cases associated with Quincke's edema—from daily administration of from 5 to 10 Gm. of glycocoll. He believes that it combines with some toxic substances.

Contractions of Ureter.—Rothmann found that potassium chloride, choline and epinephrine enhance the contractions of the isolated ureter. Atropine inhibits them to some extent. Calcium chloride inhibits the contractions; pituitary extract at first accelerates, then paralyzes them.

Tattooing of the Cornea with Gold Chloride.—Kottenhahn recommends Knapp's application of a solution of gold chloride to the leukoma of the cornea after abrasion of the superficial epithelium. The method is easier and much safer than tattooing.

Inhibition of Bacteria in the Small Intestine.—Arnold summarizes the work done by himself and his co-workers on the nature of d'Herelle's phenomenon. When the p_H of the duodenal contents is between 5.5 and 6.5, a substance is produced which inhibits the growth of aerobic bacteria. He finds it probable that this substance is the source of the transmissible autolysis.

Münchener medizinische Wochenschrift, Munich

74: 441-482 (March 18) 1927

*Action of Synthalin. W. H. Jansen and H. Baur.—p. 441.
Experiments on Paratyphoid. W. Seiffert.—p. 445. C'td.
The Cerebrospinal Fluid. K. Eskuchen and F. Lickint.—p. 448.
Pituitary Treatment of Primary Atonia of the Uterus. O. Silzer.—p. 450.
Rapid Cure of Furuncle. F. Kuhn.—p. 451.
*Danger of Combining Scopolamine with Morphine. F. Panse.—p. 453.
Dosage of Thyroid in Children. K. Ochsenius.—p. 454.
Torsion of Uterine Myoma. W. Roloff.—p. 454.
Torsion of Ovarian Cyst in Child. Ohmstede.—p. 455.
Manslaughter Charge Against Obstetrician. A. Döderlein.—p. 455.
Fake Apparatus for the Deaf. F. von den Hütten.—p. 456.
Bavarian Regulations for Physicians. H. Bergeat.—p. 458.
Expert Testimony in War Invalidism. C. Zahn.—p. 459.
German Regulations on Treating Diseases. Grassl.—p. 460.
Training of Infants' Nurses. J. Schoedel.—p. 460.
Bavarian Public Health Statistics. Seiffert.—p. 462.

Action of Synthalin.—Jansen and Baur found similarities as well as differences between the action of insulin and synthalin. Both preparations lower the amount of sugar in urine and blood as well as that of acetone in the urine. Large doses cause alkalosis. There are, however, differences to the disadvantage of synthalin: the latter does not lower the blood sugar so much; it did not seem to prevent gangrene, and permanent absence of sugar from the urine was not obtained. It increases the respiratory metabolism and lowers the respiratory quotient.

Danger of Combining Scopolamine with Morphine.—Panse reports three cases of grave poisoning with the combination of scopolamine with morphine. One patient received an injection of 0.0005 Gm. of scopolamine hydrobromide and 0.02 Gm. of morphine hydrochloride. In another case, the dose was 0.001 Gm. of scopolamine and 0.03 Gm. of morphine; in the third, 0.0004 Gm. of scopolamine and 0.02 Gm. of morphine. Artificial respiration, continued for hours, resuscitated the patients. He advises using scopolamine alone in excited psychopaths. One milligram does not cause any respiratory or cardiac paralysis.

Wiener klinische Wochenschrift, Vienna

40: 377-408 (March 24) 1927

*Nervous Disturbances from Disease of Body Wall. F. Hartmann.—p. 377.
Calmette's B. C. G. Immunization. E. Suarez.—p. 381.
*Sex Specificity of the Skin. E. Herrmann and W. Schiller.—p. 382.
Liver Function Tests. F. Faltitschek and H. Krasso.—p. 386.
Incarcerated Sliding Hernia of the Ovary. A. Marconi.—p. 389.
Limits of Roentgen-Ray Diagnosis. O. Maier.—p. 390.
"Whooping Cough and Pregnancy." H. B. Goettsch.—p. 391.
*The Hemolytic Streptococcus and Scarlet Fever. R. Kraus.—p. 391.
Value of Rectoscopy. G. Lotheissen.—p. 392.
Nervous Disturbances in Astigmatism. K. Lindner.—p. 393.
Treatment of the Lighter Forms of Psychosis. E. Stransky. Supplement.—pp. 1-28.

Nervous Disturbances from Disease of the Skin and Subcutaneous Tissue.—Hartmann believes that there is a widespread disease consisting in a change of the colloid condition of the fluid parts of the skin and subcutaneous tissue into the condition of a gel. Such skin cannot be lifted in a fold, like normal skin, and is sensitive. Sometimes the change is limited to small streaks. These patients have all the symptoms of neurasthenia, but recover after massage and application of heat. Carlsbad treatment is also useful.

Sex Specificity of Skin.—Herrmann and Schiller injected intracutaneously lipoids obtained from ovaries and testes. They observed after two to four weeks a secondary reaction which occurred in women after injection of ovarian extracts; in men, after testicular extracts.

Hemolytic Streptococcus and Scarlet Fever.—Kraus concludes that by using the filtrates on human beings the Dicks found in an ingenious way the key to the solution of the scarlet fever problem. He declares that all the postulates are fulfilled for regarding the scarlet fever streptococcus as the agent of scarlet fever and the disease as a specific toxicosis perfectly analogous to diphtheria.

40: 409-444 (March 31) 1927

The Stomach in Parkinsonism. L. Hess and J. Faltitschek.—p. 409. C'td.
Malaria Treatment of General Paralysis. J. Gerstmann.—p. 413.
Chromocholecystography. J. Rosenblatt.—p. 416.
*Testing the Sensitiveness of the Skin to Rays. L. Freund.—p. 419.
Antivirus in Odontology. H. Schlein.—p. 420.
Roentgen-Ray Treatment of Whooping Cough in Pregnancy. Z. von Hrabovsky.—p. 422.
"Postvaccinal Encephalitis." F. Lucksch.—p. 423.
Prescription Writing. A. Mayrhofer.—p. 423.
Clinical Study of Extrasystoles. D. Scherf.—p. 425.
Indications for Venesection. V. Kollert.—p. 427.
Treatment of Atherosclerosis. A. Strasser. Supplement.—pp. 1-19.

Sensitiveness of Skin to Rays.—Freund tests the sensitiveness of patients by preliminary application of definite amounts of the gamma rays of radium.

Zentralblatt für Chirurgie, Leipzig

54: 321-384 (Feb. 5) 1927

Importance of Stereoscopic Roentgen-Ray Pictures. S. Frey.—p. 322.
Tetany Following Operation for Suppurative Cholecystitis and Acute Necrosis of the Pancreas. R. Bertelsmann.—p. 324.
*Combined Paravertebral and Spinal Anesthesia. E. Beck.—p. 326.
Operative Fixation of the Spine in Spondylolisthesis. A. W. Smirnow.—p. 328.
Apparatus for Measuring Kyphosis. T. N. Ssiltschenko.—p. 330.
New Plastic Procedure for Inguinal Hernia. W. Block.—p. 332.
Sarcoma of Pelvic Musculature Simulating Abscess. A. Lurje.—p. 337.

Painless Abdominal Operations with Combined Paravertebral and Spinal Anesthesia.—This method has given very satisfactory results in Beck's hands. For operations on the gallbladder, the lumbar injection is preceded by paravertebral anesthesia of the ninth to the eleventh thoracic nerves on the right side; for operations on the stomach by anesthesia of the seventh and eighth thoracic nerves on both sides. From 7 to 10 cc. of a 1 per cent solution of procaine hydrochloride with epinephrine is used for each segment.

Zentralblatt für Gynäkologie, Leipzig

51: 321-384 (Feb. 5) 1927

Collateral Arterial Systems in the Human Ureter. G. Frommolt.—p. 322.
*Treatment of Vesical Ureterocele. H. Martius.—p. 327.
Clinical Importance of Anomalies of the Ureter. G. Haselhorst.—p. 333.
Method of Closing Ureterogenital Fistulas in the Presence of Pyelitis. B. S. ten Berge.—p. 345.
*Conservative Treatment of Small Vesical Fistulas. B. Ottow.—p. 347.
Clinical Import of Hematuria During Parturition. A. Reist.—p. 351.
Instrument for Applying Powders to the Female Urethra. A. Stern.—p. 356.

Treatment of Vesical Ureterocele.—Vesical ureteroceles (protrusions of the intramural portion of the ureter into the lumen of the bladder) are found in women almost twice as often as in men. The case here described occurred in a woman, aged 54, and was bilateral. The symptoms, of a year's standing, were paroxymal, stabbing pains in the right lower abdomen and difficulty and burning on urination. The diagnosis was made by the aid of the cystoscope. Martius treated the case successfully by electrocoagulation with a diathermy apparatus. He describes the technic and recommends the procedure in preference to suprapubic cystotomy, unless the protrusion is too large. Anesthesia is not required. He warns against ambulatory treatment, because of the possibility of a temporary hindrance to the passage of urine through the mouth of the ureter treated. For the same reason, both sides should not be treated simultaneously, in case of bilateral vesicoceles.

Electrocoagulation for Small Vesical Fistulas.—For very small fistulas, not surrounded by hard scar tissue, Ottow recommends touching the margins of the fistula with a diathermy sound, introduced into the bladder. The procedure is almost painless. An indwelling catheter should then be inserted and left in position for ten days, to put the bladder at rest and allow the edges of the wound to come together. He had complete success with this method with a fistula of one year's standing, caused through late necrosis in the region of a sutured and healed wound in the bladder wall, inflicted in the course of cesarean section.

Mediko-Biologicheskiy Jurnal, Moscow

2: 5-109 (Nov.-Dec.) 1926. Partial Index

Influence of Vegetative System on the Metabolism of Water and of Sodium Chloride. K. Drezel.—p. 5.
Biologic Control of Antithyroidin. G. I. Azimoff.—p. 37.
*Permeability of Cerebral Capillaries for Dyes. Z. I. Morgenstern and M. L. Biriukoff.—p. 72.
*Mechanism of Anaphylactic Shock Evidenced in Isolated Organs. N. N. Sirotinin.—p. 79.
*Blood Calcium in Anaphylactic Shock. P. P. Averyanoff.—p. 90.

Permeability of Cerebral Capillaries for Dyes.—Morgenstern and Biriukoff's experiments consisted in the following: rabbits were trephined and small pieces of celloidin were placed beneath the dura mater. From twelve hours to four days later the animals were injected with trypan blue in the auricular vein. At necropsy, the inflamed part of the brain, adjacent to the celloidin, was found stained. This points to the fact that elective localization of toxins and poisons in certain parts of the nervous system depends not only on the permeability of the plexus but also on that of the cerebral capillaries. Other factors besides inflammation may favor the passage of dyes through the cerebral capillaries.

Mechanism of Anaphylactic Shock Evidenced in Isolated Organs.—Sirotinin isolated the heart and the liver of cats and rabbits immediately after appearance of the induced anaphylactic shock. The property of sugar assimilation in the heart was found not to be altered by the shock. The reaction to antigen was the same in the isolated hearts of sensitized animals as in those of the controls. During the experiments the functioning of the heart was uninterrupted. Hence, the rôle of the heart is not predominant in the pathogenesis of shock. The diastasic and glycogenic properties were preserved in the isolated livers of sensitized animals. The ureagenetic ability was reduced to the same extent as in normal livers in the course of anaphylactic shock. The author sustains Bogomolets' theory that anaphylactic shock is induced by irritation, followed by paralysis of the vegetative nervous system, from inactivation of the complement in the nerve cells.

The Blood Calcium in Anaphylactic Shock.—Averyanoff did not find appreciable changes in the amount of blood calcium in eleven dogs with induced shock. Evidently there is not any connection between anaphylactic phenomena on the part of the sympathetic nervous system and of the muscles, on one side, and ion concentration, on the other side.

Acta Chirurgica Scandinavica, Stockholm

61: 289-383 (Feb. 22) 1927

Abnormal Renal Vessels and Hydronephrosis. J. Hellström.—p. 289. In English.
Simultaneous Occurrence of Tuberculosis and Carcinoma in the Stomach. R. Faltin.—p. 331.
Surgery of Aneurysm and of Racemose Angioma. G. Eichelter and J. Knoflach.—p. 339.
*Section of the Root of the Trigeminus at the Pons. H. Olivecrona.—p. 366. In English.
*The Roentgen-Ray Picture of Acute Intestinal Intussusception. Y. Olsson and G. Pallin.—p. 371.

Section of the Root of the Trigeminus at the Pons.—In neuralgia of the fifth nerve, secondary to malignant tumor of the nasopharynx, the temporal approach for root section is impracticable, since the growth may involve the ganglion itself or the neighboring structures. For these cases Olivecrona recommends an intradural approach from a suboccipital craniectomy and section of the root at the side of the pons. The operation is technically difficult owing to the depth of the wound and the limited space in which the surgeon must work. To obtain sufficient illumination of the operative field, he recommends a small electric bulb mounted on a thin metal rod, held by an assistant. A suction apparatus is also advisable to keep the field dry. He describes a case, in which operation by the temporal route failed, but a second operation, carried out as described, was successful.

The Roentgen Ray in Examination of Intestinal Intussusception.—Olsson and Pallin report four cases in which opaque enemas were used in the diagnosis of intestinal intussusception in children. In three of the cases reduction was obtained by increasing the pressure of the enema. Anesthesia was not required. The roentgenograms are reproduced.